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ABSTRACT

A Michigan State University policy analysis class explored migrant education in Michigan through literature reviews and interviews with policymakers, teachers, and migrant children and their families. They identified four areas that need attention. First, people who understand the learning needs of migrant students should be recruited as teachers. Teachers who have the dispositions and ability to teach Latinos and other minority groups should be selected. Quality professional development should be available to teachers and aides instructing migrant children, and these teachers and aides should have knowledge of Spanish and English as well as pedagogies that allow self-regulated learning and critical thinking without devaluing diverse cultures. Second, family-school relationships can be strengthened through a "students as ambassador program" to facilitate teacher-parent communication. Third, technologies used in schools should be evaluated for cost-effectiveness, appropriateness for migrant students, and contributions to equitable access to quality education, higher achievement rates, and lower dropout rates. Finally, the allocation of resources should be studied to see how migrant students can gain real access to school personnel and facilities, how qualified teachers and aides can be hired and developed, how students can get technology they can use and "take with them," how to develop funding formulas that are more equitable to small rural schools, and how to deliver the most help at the elementary school level. An appendix presents two articles about educational initiatives in Colombia and the Dominican Republic. (Contains 55 references.) (TD)

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**Occasional Paper No. 72**

***Latino Studies Series***

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## *A Policy Analysis Report*

*Maria Teresa Tatto • Virginia Lundstrom-Ndibongo • Brenda E. Newman*
*Sally E. Nogle • Loukia K. Sarroub • James M. Weiler*

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*November 2000*

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Phone (517) 432-1317 • Fax (517) 432-2221
Home Page: www.jsri.msu.edu

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* This paper was completed and presented to the Michigan Department of Education officers and other faculty at Michigan State University in the Fall of 1996.

**About the Authors:**

***Maria Teresa Tatto[1]*** is an associate professor of education at Michigan State University. She has coordinated and participated in local and national research studies in Latin America, the United States, and Asia. She has published several articles and book chapters dealing with analysis of educational policy, the effects of education reform on teachers' practice, the influence of teacher education, and, more recently, values education policies in Mexico. Her areas of specialty are the comparative study of teacher education and student learning, the relationship between educational policy and practice, and the comparative study of the contexts of policy formation in education.

***Virginia Lundstrom-Ndibongo*** works on computers and learning technologies in South Africa.

***Brenda Neuman-Sheldon*** works at Policy Studies Associates in Washington, D.C.

***Sally E. Nogle*** is Associate Athletic Trainer, Adjunct Faculty, in the Department of Kinesiology at Michigan State University in East Lansing, Mich.

***Loukia Sarroub*** is an Assistant Professor at the University of Wisconsin in Madison, Wisc.

***James Weiler*** is pursuing his doctorate in curriculum, teaching and educational policy at Michigan State University, in East Lansing, Mich.

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**Abstract:**

The present report originated in a MSU policy analysis class taught during 1996. The professor and students agreed to construct a class that represented a grounded experience in policy analysis touching upon a current and relevant issue. We began exploring the policies surrounding the education of migrant children in Michigan.

Our goal was to learn about the policies related to the of education of migrant workers' children and to develop an understanding of the issue's complexities. We knew our work would be limited by time, financial, and political constraints. These constraints limited our work to an exploratory inquiry supported by literature reviews and informational interviews with key individuals in selected Michigan sites.

We chose this "invisible" policy issue for several reasons. Migrant education offered us the opportunity to examine current reform tendencies to provide access to quality education for all children, the preparation of teachers to support select populations, the organization of schools to accommodate these children in response to vague policy mandates, and power issues affecting the different constituencies and stakeholders. Thanks to the support of the Julian Samora Research Institute, the Michigan Department of Education, and various individuals, we held face-to-face interviews with policymakers, teachers, and migrant children and their families.

Our purpose was to begin a critical and constructive dialogue among the parties involved in the development and implementation of this policy.

# The Education of Migrant Children In Michigan

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We were both moved and inspired by their deep commitment to migrant children and to Latinos in this country

## Executive Summary

Our informal inquiry uncovered four areas in the Migrant Education Policy in need of careful examination. Based on the experience of nearly 30 years of educating migrant children in Michigan, we believe that the series of proposals below may help improve migrant education policy.

(1) We propose that the Department of Education, Schools Districts, Migrant Education Directors, and teachers take a careful look at those issues specifically affecting teachers and the teaching of migrant students to improve the quality of education these students receive. Four areas in need of study and improvement are: the recruitment of individuals who have the potential to understand and address the learning needs of migrant students; the selection of teachers who have the knowledge, skills, and dispositions to teach Latino children and students who are not a part of the dominant culture; the availability and quality of educational development opportunities for experienced and prospective teachers and teacher aides who will be in charge of the instruction of these children. The education needs of teachers and aides include not only knowledge of Spanish and English, but of the subject matter and of pedagogies that allow self-regulated learning and critical thinking without devaluing diverse cultures and backgrounds; and, the relevance and availability of organizational supports for students and their teachers including the development, guidance, and use of innovative curriculum and instructional technology.

(2) We propose to strengthen the links between migrant families and schools. We suggest this can be done through a "students as ambassador program." This means that the migrant students will be responsible for facilitating communication between their families and teachers, but with the help of their teachers, local migrant education recruiters, and their churches. They will be the intellectual and social conduits needed by parents and schools in order to learn from and about each other. We think that the student ambassador program is likely to generate an "organic" mechanism for establishing rapport among the migrant students, their parents, and the school teachers and administrators. We believe that the connections made between school and home are crucial for the academic success and socialization of migrant students into the American school culture.

(3) We recommend a more focused study of available technologies, both electronically and paper based, and a needs analysis among the population of potential users. We warn against making decisions without the basis of empirical evidence. Technology — especially electronic technology — is expensive and may be underutilized if it is allocated without a clear idea of how it would be used, and by whom, within an specific context. Furthermore, hidden costs such as equipment maintenance, technical support, and personnel training may hinder use or effectiveness if not fully considered as part of the implementation strategy. It is possible that simpler — paper and pencil — technologies may prove more beneficial and equitable for migrant students in the long run. We recommend a cost-effectiveness study of technology acquisition, distribution, and use before moving to implementation. The criteria for technology acquisition and distribution should be how much it will actually contribute to providing equitable access to quality education by migrant students, higher achievement rates, and lower school drop out.

(4) We recommend a more detailed and informed study of how resources have been distributed thus far and the outcomes of such distribution. Specific areas of study are: exploring ways in which migrant students can gain real access to school personnel and facilities; how to allocate funds to hire qualified teacher and teacher aides; how to allocate enough funds to provide in-depth teacher development activities[2]; how to reallocate substantial funding to the development/acquisition of curricula and textbooks to provide students with technology they can use and "take with them" as they move from school to school; the development of a more equitable formula to distribute funds to schools (migrant students in small rural programs should have as much access to education/funds as students in larger rural/urban programs); allocating the majority of funds to help students at the elementary school level — intervention in middle and high school though important and necessary may arrive too late and takes on a remedial rather than a preventive character; developing evaluation and accountability systems to keep the program focused and true to their goal.

In closing we need to say that it was difficult for us to find a well defined program with a clear and cohesive theoretical basis and purpose. We concluded that a cohesive migrant program does not exist. We found different interpretations of what the migrant program is as we talked to different individuals in different locations. Migrant education directors and implementors will need to invest time in developing a mission and shared understandings as to what the migrant program is all about to help all those involved.

# The Education of Migrant Children In Michigan

The education of migrant children in the state of Michigan is a complex issue. There are a great number of social, economic, and political forces that are intertwined in identifying and meeting the needs of this special population of students. A primary concern that we address in approaching this issue is how to "define" the problem. John Kingdon (1984) identifies problem definition as highly important in the policy making process.[3] In policy terms, a problem is a pre-existing condition about which we believe something should be done. It is important to remember that before any policy can be created and enacted, the problem must be perceived as real and important. Difficulties facing migrant students are real (low achievement in school, high drop-out rates) and important (individuals systematically being mistreated by the school system).

Migrant students have special needs because of poverty, racial bias, language barriers, and their constant mobility. One of the largest difficulties facing migrant students is their being grouped with other "special needs" students that receive services in response to conditions that are considered to be similar to their own. However, as important as it may be for students to receive educational services to combat poverty, racial bias, or language barriers, we must not forget that migrant students are a "special case" of a larger group (Latinos) due to their constant mobility. Within the context of a limited number of resources (fiscal and personnel) we may find difficulties arguing to those in power that migrant students may need more services than their peers who face many of the same difficulties as they, but the needs of migrant students demand this endeavor.

Andrew Trotter, in *Harvest of Dreams*, wrote that "language difficulties aside, even the simple act of going to school adds complications for migrant students. The barriers can include different textbooks from district to district, time lost in enrolling and transferring records, and prejudice and ridicule from other students, (many) leave little mark in school, moving away before teachers glimpse the needs behind their shy faces."[4] Thus, we can begin to see that migrant students face a sort of filtering mechanism in addressing their unique problems. The ability of migrant students to receive an appropriate and equitable education is an issue deeply embedded, first, in those issues affecting the entire Latino population and, second, in those affecting the nation at large. If schools are not meeting the needs of many different groups of students, including migrants, the question we have to ask ourselves is "why?" In order to answer this question, we address the various "levels" of policy efforts in generalized terms so that we can see just how migrant students are not served.

Nationally, our schools are perceived to be failing all students, not just those from underrepresented populations. As a result, the "Goals 2000" initiative was developed as a benchmark system to chart school progress to the end of the millennium. The project was, in part, an understood solution to meet the needs of those not currently being well-served in American schools. A broad based reform effort, mostly founded in political rhetoric rather than coherent prescription, "Goals 2000" provides us with an encapsulated explanation of the direction in which educational reform in the United States is heading.[5]

These goals seem to fall into three main categories: economic and socialization efforts – student achievement and citizenship, adult literacy, beginning school ready to learn, parental participation; school restructuring – professional teachers, safe schools; and competitive – raising graduation rates, first in math and science. It is assumed that accomplishing these goals, no matter how general, would by extension require improvement in migrant student achievement. In other words, a comprehensive generic reform framework is presumed to succeed in addressing individual needs. However, it is important to note that the primary aims of these goals appear to be of a social and economic nature. This focus on aims related to socialization, responsible citizenship and productive employment, highlights just how narrow the "Goals 2000" focus is. Goal number eight – parental involvement to advance social, emotional and academic growth – speaks volumes about this issue. If the goal is to increase students' social, emotional, and academic growth, we must ask by whose standards this is being judged.

"Goals 2000," with its emphasis on social goals, paints a portrait of the ideal environment for students, that which currently exists for the average White middle class family. Rather than transforming schools to meet the needs of increasingly diverse populations, the goals attempt to shape those attending school.

John Goodlad, in *Teachers for Our Nation's Schools*, wrote: "the American people have tranquilized themselves into believing that most of the shortcomings of the schools can be accounted for by the shortcomings in the families of minority students... this belief blinds us to the fact that schools created to serve expectations and student populations quite different from those now prevailing... are not up to today's demands... education cannot be a substitute for economic and social reform."[8]

Can we truly address the issues of migrant students by attempting to transform them into the ideal picture of the successful American family?

The 1995 National Goals Report, "Building a Nation of Learners," devoted a chapter to "How Can Family-School-Community Partnerships Accelerate Progress Toward the Goals?" The report states that "a number of educators and researchers argue that if the National Education Goals are to be achieved, families, schools, and communities must work collaboratively to form strong family-school-community partnerships."[7]

The National Goals panel defines this partnership as recognizing "the equal status of families and schools in their shared responsibilities" for student learning and achievement.[8]

The Goals report cites three main rationale for promoting these partnerships. First, research suggests that increased family involvement is associated with positive achievement and behavior outcomes. Second, there is widespread public support for increased parental involvement in schools. Third, the goals are interrelated and parent, as well as school, effort is required to attain them.[9]

Nearly all of the "solutions" to the problem of low parental involvement in student education take for granted a specific family and community structure – stable, English-speaking, political voice.[10] In short, the White middle class ideal, definitely non-migratory.

Is it fair to ask families and communities to change to meet the needs of current school structures? Meier and Stewart, in *The Politics of Hispanic Education*, argue that political minorities such as Latinos are limited in their access to educational equity as demonstrated by attempts to "Americanize" them in public schools.[11] This serves to promote inequity by discounting the value of other cultural and community ideals. This specific type of socialization, to the White middle class ideal, presents quite a negative view of minority populations in the United States. Through attempts to make migrant students more like those who succeed in schools, policies have identified these individual students as being the problematic variable. Instead, the focus should be on creating a curriculum that responds to diverse student needs, developing and supporting teachers who are capable of educating and caring for a wide variety of students, or responding to alternative community needs.

Many of the difficulties facing migrant students are the same as those facing all Latinos in American schools. Latinos are more likely to live in poverty, be denied educational access, and need more education (population statistics indicate that a larger percentage of Latinos are of school age) than their White peers.[12] Claude Goldenberg writes that Latino students perform at lower levels of achievement, and drop out more frequently than White students in American schools. He states that, over the past 15 to 20 years, 85% of Hispanic fourth and eighth graders still read at a 'basic' level or below. Over half score below 'basic,' meaning that they cannot demonstrate understanding of a text written at their grade level.[13] He concludes that there are a great number of difficulties for students from Spanish speaking backgrounds, and that programs need to be created to improve their academic achievement.

Many reformers frame the problems of Latino achievement and success in American schools as promoting a permanent underclass in American culture. According to Rosenbaum and Siles, the low educational attainment levels for Hispanics provides us with bleak prospects for their future. The consequences can be forecasted as "large unemployed and unemployable segments, disinherited from the benefits of the material and technological advances of society."[14] The theoretical (or maybe not so) creation of an underclass speaks directly to how and why the education of migrant students is so politically charged. The connection between schooling and the economy (as seen in initiatives like "Goals 2000") demonstrates our common social belief that through schooling social circumstances can change. Thus responses, such as Michigan's Migrant Education program, are created. But, what happens when even those initiatives are unsuccessful?

The "bleak" future for Latinos, especially in the context of schools, is usually cast as a language problem. Many school programs designed to serve Latino needs are solely based on bilingual or English as a second language (ESL) model. Goldenberg argues that bilingual education programs are not enough to solve achievement difficulties for these children since "greater poverty and lower levels of parental education place these children at risk for educational underachievement, regardless of instructional language."[15] Only "effective instruction, curriculum, school-wide organization, and home-school collaboration" combined with "long-term, systematic research and evaluation in multiple sites [with] state and national level policymakers develop[ing] initiatives to deal constructively with the issues educators face as they work to provide effective and equitable educational opportunities for immigrant and language minority students," will help Latino students to succeed in schools.[16] While Goldenberg is writing about issues related to immigrant and Latino students, he promotes a "change" model for schools that addresses the larger problems facing "at-risk students" and school restructuring. Through common goals, success indicators, effective leadership, and capable participation, he proposes that teacher attitudes and behaviors can be influenced to affect change in student outcomes.[17]

Once again, we have a "solution" to the "problems" facing a group of disadvantaged students placed within larger reform efforts. While these efforts are indeed noble, their ability to truly affect specialized populations such as migrant students is questionable. Effective instruction, curricula, and school organization, as well as parental involvement and research, may in fact benefit migrant students, but they do not address the real nature of the problem. The migrant population is a distinct, marginalized minority within another "disadvantaged" group. The educational programs that focus on larger more broadly conceived of groups do not address the unique needs of a transitory population.

Within the State of Michigan, federal funds earmarked for migrant education are administered to districts. These Title I funds (within Title I, Part C is designated for the education of migratory children as part of the 1994 Improving America's Schools Act) are used as supplementary income for districts serving migrant populations. Michigan's Migrant Education Program theoretically addresses the unique "transitory" needs of migrant students.

The stated goals of the Michigan Migrant Educational programs are to:

- *support high quality comprehensive educational programs for migratory children to help reduce the educational disruptions and other problems that result from repeated moves;*

- *insure that migratory children are provided with appropriate educational services (including supportive services) that address their special needs in a coordinated and efficient manner;*

- *ensure that migratory children have the opportunity to meet the same challenging State content standards and challenging State performance standards that all children are expected to meet;*

- *design programs to help migratory children overcome educational disruption, cultural and language barriers, social isolation, various health-related problems, and other factors that inhibit their ability to do well in school, and to prepare such children to make a successful transition to post-secondary education or employment; and*

- *ensure that migratory children benefit from State and local systemic reforms.*[18]

These goals vaguely address the unique needs of the migrant population within a larger disadvantaged group. But, they are merely statements of intent unless they are used to form policies that are coherent and uniformly implemented to best serve the needs of all migrant students.

Trotter argues that school district boundaries provide barriers to migrant student achievement. Districts' commitments to current personnel structures and programs exacerbate the difficulties of mobile students. The emphasis on one appropriate structure for schools as well as the ideal of a stable non-migratory family and community structure do not allow for "differential" participation in schools.

Another important consideration is the special nature of Michigan's migrant education programs. Because of seasonal crops, the majority of migrant students are in Michigan during the summer months and early fall. The vast majority of these students are only in schools for the first few weeks of a traditional academic school year. As a result, many districts use of migrant student funds are concentrated in the development and implementation of summer programs rather than school year supplemental services. Thus, we must consider a number of factors when looking at the Michigan program.

There are a number of circumstances that are unique to Michigan that are not applicable to other areas. Trotter advocates collaborating with local growers, district flexibility with rules (i.e. maximum excusable absences), involving migrant parents (bringing to meetings, language services), and administrators working cooperatively with regional programs to determine credit equivalences in order to truly meet the needs of migrant student populations.[19] While Trotter's argument is important to note, and his conclusions valid, they assume a common conception of the needs of migrant children. His solutions are more structural than ideological. We need to focus on both structural and ideological factors in order to create effective policy.

When any policy initiative is enacted, one cannot automatically assume that the implementation of that policy will continue. For any number of reasons a policy measure in implementation may look nothing like the policy creators intended. Certain criteria such as: careful research, clear concise goals, detailed unambiguous regulations, strong constituent support, sufficient resources for planning and coordination, and monitoring mechanisms provide for ease of implementation.[20] However, this seems to not be the case with Michigan's migrant education programs.

At the state level, research is scarce and disconnected, the goals are broad, there are minimal regulations dictating how funds should be used, constituent support is practically non-existent, and there are few planning, coordinating, and monitoring mechanisms in place. Thus, it is left up to the individuals at the district and school levels to conceptualize, design, and implement programs and to determine whether the needs of migrant children are being met.

Given these broad, rather loosely defined State and Federal policies, it seems pertinent to ask what kinds of programs are local districts creating to meet the needs of migrant students. Furthermore, how do the districts identify these students' needs and evaluate whether or not they have been met?

Weiss' information, ideology, and interest framework seems to be especially relevant in this context. The policy talk surrounding educational reform and the education of migrant children is high on ideology and interests, but quite low on information. Weiss noted that "the public policy positions taken by policy actors are the resultant of three sets of forces: their ideologies, their interests, and the information they have."[21] Weiss further stated that how policy actors define their interests depends, in part, on how they perceive the situation.[22] Thus, diverse ideologies and interests of the players in this complex policy game impact the development of programs at the local level.

The implementation of policies that come from above are subject to the coping mechanisms of those who must implement them. Weatherly and Lipsky (1977) interpret local school districts as street level bureaucracies[23] who are trying to mange the larger context of national reform efforts: "street level bureaucrats (SLB) are the policymakers in their respective work arenas."[24] The work of the SLB results from individuals' interpretation of the mandates that come from outside influences. If we are to call migrant education programs "top down" policy initiatives, then the SLB is the person on the "bottom" who works with the stuff from the "top." In implementation, this translates to the "bottom" having power over the "top." In spite of the apparent power of the SLB, migrant education programs need a strong cohesive framework to guide their activities. Policymakers need to develop policies that are responsive to migrant children's conditions, develop more centralized controls to regulate the actions of local authorities and school personnel, and are clear enough to not be overwhelming to those who must implement them.

There are numerous theories that address the importance of local participation in the development of policies and programs for disadvantaged populations. Meier and Stewart conclude that "the source of change will be of necessity local," because they do not see federal intervention as likely in the current political climate.[25] Some theorists propose restructuring the school system to adapt to local circumstances. Tyack and Cuban envision policymaking as a kind of "hybridization," those at the local level are not only encouraged, but expected to transform policy at the local level as part of the process.[26] Emphasis on differentiation based upon local circumstance highlights the importance of "local policymaking" views. This results in little cohesion or similarity in the "actual" programs serving migrant students. Without centralization or standardization of any kind, there is no national inter-school connection available for migrant students. Given their relatively short stays in each geographical community, local differentiation may make it impossible for students to connect to any school.

How a district perceives the "migrant problem" to a large degree influences the programs and services offered. Where the problem is conceived in the context of community issues, a vast array of services may be provided, whereas if the problems of migrant students are understood to be cases of individuals special needs, then services may be more limited. Thus, in spite of common State "goals," State funds are used to meet very different ends. Elmore wrote that it is important to look at the discretion level in order to understand policy implementation and that we must take into account the "reciprocity in the relationship between superiors and subordinates in organizations; the connection between hierarchical control and increased complexity; discretion as an adaptive device; and bargaining as a precondition for local effects."[27] Creating policies that effectively meet the needs of migrant students involves far more than stating aims and conceptualizing the problem.

We must take into consideration how policies will be, or are currently being, implemented on the local level and how the institution of schooling will adapt to the programs in place.

The differing interpretations surrounding the use of Title I funds speaks to Rein's controversy over universalist-formalist/selectivist-discretionary positions of service.[28] Differential understandings of universal entitlement versus selective administration frames and different district philosophies of what would be best for both migrant students and the district at large. In some cases addressing solely the needs of the migrant students (selectivist) is predominant while in other cases improving the educational opportunities of all district students thereby improving the situation for migrants (universalist) is cast as most valuable. We can begin to understand that policy solutions closely follow the underlying assumptions upon which they were conceived. Given the decentralized administration of funds for migrant education programs, as well as the highly localized nature of program development, there can be large discrepancies in the types of services offered and the values that they represent.

There are different ways to conceptualize the "migrant" problem. While some districts subscribe to a policy model focusing on changing students and families within schools that demonstrate a great deal of alignment with projects such as "Goals 2000," others focus on community and political activism as an attempt to transform the nature of schooling to meet the needs of migrant students. Thus, we get different "implementation models" of the same policy. Differential and misdirected conceptualizations of the "migrant" problem persists for very clear reasons: the migrant community is fragmented and lacks political clout; disadvantaged groups are seen as the problem; and schools, as institutions, have not properly adapted to meet the diverse populations' needs. Without strong, collective, politically active voices, the migrant community will constantly be under others' "care." Programs and policies are then developed to change them to meet the schools' needs (and the White, middle-class ideal), rather than developing ways that schools can change to help them.

The lack of a unified vision for the migrant population exacerbates these difficulties because there is little or nothing to prevent these "others" from defining the problem however they see fit.

There needs to be more uniformity in programs and services that are offered to migrant students. This could be most effectively accomplished through a coherent and "universal" conceptualization of the problems facing migrant students. The differential understandings of what it means to provide for special populations allow for a great diversity in understanding what students need. Relevant questions are: What are the specific needs of migratory children? How can schools best adapt to meet those needs?

It is important to note that the central question is: how can *schools* or *programs*, not how should *children*, adapt? Behn, in identifying the importance of political considerations in policy, translates that need into paying attention to constituencies – those who stand to win or lose from policy alternatives.[28] Thus, we must remember that we are dealing with groups of people and not just institutions.

Before we attempt to develop any policies to benefit migrant students we should strengthen our information basis about how the institution of schools interact with the interests of migrant students. We need to develop a common understanding of what the needs of migrant children are within the context of the broader educational reform. Then we can allow for districts to adapt to local circumstances based upon a common understanding that is more than words, and can be translated into effective action.

## Teaching, Teacher Education and Development

*The policy problem and its location in the larger context of the ongoing educational reform*

In practically all documents dealing with the direction of the current educational reform to improve the quality of education, the effectiveness of teachers and teaching, and the provision of adequate teacher education, are underlined.[29] A strong assumption permeating these documents seems to be that higher and uniform standards, and better prepared and supported teachers, will have an impact on learning, graduation, and achievement rates.

Although, in principle, we believe that higher standards and better preparation will improve teaching and learning for a good number of students, our concern here is with the standards, preparation, and supports that teachers will need to teach children who are unlike traditional students, the very children the document argues is trying to serve. The reform documents seem to make scarce references to the intersection of two important concerns: how to support teachers to be effective teachers for all students; and, the efficacy of teacher preparation to help address the needs of these specially non-traditional students.

In these reports no mention is made of the particular challenges that migrant students and their teachers confront in spite that in eight years (1989-96) national funding for migrant education has been close to $300 million and that a percentage (in this there are specific guidelines) of these funds is expected to be directed at teacher selection, and development. Similarly, little is said about the development of curricular materials that can effectively improve these students' learning

Although teachers of Latino students – specially migrant students – may need more guidance, paradoxically such guidance is absent or it is assumed to be supplied through the presence of bilingual teachers who may be poorly qualified to provide the required support in other important areas (e.g. in subject matter teaching such as Mathematics or Science) or in low supply across the nation.

In Michigan the consolidated education plan suffers from problems similar to the ones permeating the reform documents." Specific plans regarding appropriate teachers (in numbers and qualifications) or curriculum are noticeably absent; more attention is placed on nominal descriptions of resource distribution. Thus we learn that migrant education receives about $11 million from the Federal government for an average of 21,000 students spread out among 59 projects (39 regular and summer programs; 14 regular school year only; and six are summer program only) as of 1995. Looking at these figures we also learn that only 4% of the budget allocated to migrant education goes to curriculum projects while 6% is distributed among interstate and intrastate coordination, technical assistance, statewide needs assessment, data collection analysis and reporting, and to professional development.

As it is likely to be in other migrant education programs across the country, in several reports dealing with this issue published recently by the Julian Samora Research Institute (JSRI), the focus is prominently economic (distribution of resources, number of children served, etc.). Except for low test scores and high dropout rates in the higher grades, we know little about how children are actually being served by schools, what goes on in classrooms, what are the qualifications of those hired to teach and to help them, and what kinds of curricular materials are used and with what results. Similarly unknown are answers to other more important questions such as what and how much are students learning, how does learning occur for these students vis-à-vis their classmates, how many days do they attend school, whether or not they can justify attending to a Summer program in addition to attending a regular school program during the rest of the year, whether or not the same curriculum used for non-migrant students benefits migrant students, what are the effects on students' learning of the lack of continuity and coordination in the curriculum across schools.

In sum, we are missing convincing evidence of what works and under what circumstances, and how does it work and for whom.

*Possible sources of the problem*

After a review of funds distribution in the recent Michigan Department of Education (MDOE) consolidated plan, we concluded that very little is allocated to important resources that can make a difference in the quality and effectiveness of instruction for these students such as curricular materials and teaching personnel. In addition, in a number of our interviews and field trips we came away with the impression that the use of the funds allocated to migrant children is largely unspecified (e.g. could be used to buy books – the decision of what books to buy could be left to the staff who might be teachers and choose books that, though attractive, are empty of academic content – or to hire aides with few or no qualifications to fill adequately the job) and dependent in large part upon the administrator (principal/superintendent/ director) in charge.

The actual effect of these funds seem to be masked by funds coming from other sources (such as Title 1, Chapter 1, Bilingual Education, etc.) migrant students are eligible for as a consequence of belonging to many other populations' sub-groups. Because of these layers of programs it is difficult to "see" the "net" effect of the migrant education funds or of a migrant education program. It was difficult to find specific "program" goals and/or specific "program domains" by which the program/funds can be held accountable. In large part the teachers and aides are the ones who are closest to the problem and the ones who constantly make decisions and take actions that "shape" migrant education around the state. Given the responsibility these teachers and other school personnel have vis-à-vis migrant education it becomes even more urgent to develop adequate supports and professional development efforts for those involved. Because migrant education seems to operate in a very decentralized fashion, it is likely programs "that work" could be found throughout Michigan. Describing how these work, and learning from them, can help develop effective strategies to educate migrant students.

The concept of a migrant education program is one that still needs to be constructed, but only after a serious and empirically based effort to learn what is out there, how is it working, and for whom.

*Poor knowledge availability from evaluations or policy studies*

A review of the available literature in the ERIC System and HOLLIS from Harvard University revealed few studies that included empirical evidence of what works when educating migrant students (but also Latino students) vis-à-vis teacher education or development, teaching and learning conditions, and curricular material. Though few in number, some of these studies indicate promising avenues to educating Latino-migrant populations successfully.

For instance, distance education is a technology of instruction that has been successfully used for elementary school students in Australia using a combination of correspondence papers from students, telephone contact with students, home tutors and short-term face-to-face lessons with itinerant students. These teachers worked with 15-20 students, usually in family groups across grade levels. The program's experience points to the importance of positive teacher attitudes when implementing an educational program for a marginalized group.[32]

In Texas a pilot program was created to teach Algebra to migrant students via audioconferencing. This program proved to be a feasible alternative to on-site instruction noting high class grade averages and students' increased mathematical ability.[33]

In a longitudinal study carried out by Ruiz (1995), holistic-constructivist pedagogy was introduced into bilingual special education classrooms with teachers changing from a medical model to a contextual performance model for viewing abilities and disabilities with a consequent change in students' attitudes toward reading and writing, and student meta-cognition regarding effective literacy-related strategies.[34]

The California Speech Communication Association developed a collaboratively culturally diverse training package approach to assess pupils classroom proficiency and skill enhancement and the development of an ESL testing battery. The second stage deals with training CSCA members and outside individuals to be multicultural trainers; they would then train others and establish a network of multiculturally-aware teachers at all important locations.[35]

Velma Menchaca and Jose Ruiz-Escalante (1995) identify seven research-based suggestions that would assist teachers in creating effective strategies for migrant education students: (1) building a positive environment that helps students to adjust to a new learning environment through modeling respect, eliminating the threat of ridicule, and sharing common experiences; (2) building on migrant students' strengths and experiences (the students have a richness of diverse experiences, cultures, and languages. Not only are learning activities enhanced by student's prior knowledge, their lives are validated by an academic institution); (3) promoting self-concept and self-esteem (to overcome the many obstacles, migrant students must have faith in themselves; when necessary, teachers should modify assignments to allow for real success in meaningful activities that are valued by the student and by others, such as family and friends); (4) personalize lessons with students' experiences (drawing from students' life experiences should be used to help students understand ideas and transfer them to the content area); (5) integrate culturally relevant content (through novels, discussions, and writing students should learn of others sharing a familiar cultural base; teachers should encourage positive ethnic affiliation; values, attitudes, lifestyle choices, and approaches to learning are often influenced by how one learns to respect other cultural groups' heritage and histories while retaining their own); (6) using cooperative learning (studies show that cooperative learning helps migrant students achieve in a supportive setting, reduces anxiety levels, improves motivation and self-esteem, and helps students gain access to learning opportunities); and (7) developing students' metacognitive learning strategies.

The idea is to help students become independent learners so they can recognize approaching obstacles and make appropriate changes.[36]

A study of households practices, classroom observations, and implementation of an after-school site, where researchers and teachers examine classrooms practices and use local resources to experiment with literacy instruction carried out by Moll (1990), found that the working class Hispanic households possessed ample funds of knowledge that become manifest through households activities. In contrast to households, most classrooms and most teachers function in isolation not only from other classrooms, but from the social world of students and the community. The key to the development and implementation of any innovation, according to the authors, was teachers' involvement in the research process and their use of these funds of knowledge in a many ways including, inviting parents to contribute to lessons. Findings suggest that reading and writing lessons be reorganized to become more interactive or participatory, emphasizing the children's use of literacy to obtain and communicate meaning.[37]

In general, however, the problems of these populations have been dealt with programs such as intensive English for speakers of other languages classes, bilingual programs that teach courses in the native language as students learn English, and newcomer programs that provide transition courses to facilitate students cultural and academic adjustment. In all these interventions "quality of instruction [is seen] as hampered by students varying English proficiency and academic skills and by a curriculum that does not parallel the one provided to other students."[38]

Without knowing more about the attributes and character of teachers' and migrant students' interaction in Michigan, it is difficult to suggest specific policies that could help alleviate the problem. Nevertheless, based on preliminary information gathered rather informally in daily visits to two migrant programs (one large, one small), from interviews with Department of Education officials, and from taped interviews with teachers from two of the Projects (provided by Dr. Edgar Leon), we can delineate a number of possible directions for improvement subject to future research.

*A needed focus on teachers*

There seems to be a mismatch of these students realities, desires, and needs with traditional structures of schooling.[39] But students in the larger district view teachers as being well situated to make important changes. They described characteristics of teachers who had important influence in their lives, these teachers treated them as individuals, they asked questions more than just provided information, they modeled learning, encouraged them in their learning, paid attention to them while in the classroom, took the time to get to know them, made clear they had high expectations from them, gave each student individual attention, had or developed knowledge of Latino culture, understood their limitations and still pushed them to work hard and excel, and were culturally sensitive. These students made a strong plea "to be a part of the regular classroom and be treated fairly," and they saw the teacher as responsible for establishing this climate.

A parent and grandparent stressed the importance of teachers who were strict and who cared about the children and their learning. A mother saw teachers who wanted her to participate in a dialogue regarding the curriculum as a sign of their incompetence in the subject matter knowledge and knowledge of teaching practice. She wanted them to take the role of authority. According to scholar Lisa Delpit, parents' desire to see teachers act as an authority is actually a call to be more explicit of their expectations from their students.

Because implementation tends to be evolutionary (Majone and Wildavsky, 1979) teachers are continuously in the center of a process of deciding or redefining objectives. If policymakers are to "rely on learning and invention rather than on instruction and command" to implement policies, they need to begin by recognizing the teachers' vital role for the success of any policy.

*Reconceptualizing the problem as it affects teachers and students*

The issues pertaining to teachers and teaching of migrant students can be conceptualized as belonging to four large areas: recruitment and selection of teachers who will have the knowledge, skills, and dispositions to teach Latino children,[40] education and development, and organizational support including the development, guidance and use of innovate curriculum and instructional technology.

*A - The recruitment of individuals who have the potential to understand and address the learning needs of migrant students*

In this report we argue the need to recruit teachers, regardless of ethnicity, who have the skills, knowledge, and dispositions required to teach Latino and other children. This implies the development and enforcement of higher and uniform standards in the recruitment of teachers and teacher aides for migrant programs. Some of the characteristics sought in these teachers might include teachers or prospective teachers of Latino origin but they do not need to exclude teachers of other origin. In theory, we believe it is possible to find individuals with a learned ability to appropriately address the needs of these students.

The Michigan Department of Education and universities need to work collaboratively to actively recruit and train more teachers from various communities that the schools serve, with a concerted effort to have more people who understand children from migrant working backgrounds.

There are a number of advantages to having teachers who know and understand migrant children. First, these teachers would serve as visible, positive role-models. When asked, a student stated, "it would make me feel good if I see more [Latino] teachers." Second, teachers need to learn that Latino children and parents may need to make tacit expectations clear and explicit. Subtle clues White and "school savvy" students and parents understand might go unnoticed by the Latino population making communication about academic matters frustrating and difficult. Third, teachers need to learn how to feel comfortable and incorporate more people from the community to support children's academic learning. Having teachers who are able to build connections across schools' diverse constituencies would be able to help bridge the traditional gap between school and home.

A number of empirical studies have found that many parents are intimidated to speak to teachers, not being able to speak standard English well only exacerbates this situation. As the students informed us, most often they are the link between school and home, and they felt as though the responsibility of communicating the need for schooling fell on their shoulders. Decreasing the barriers for parents to speak directly to their child's "regular" teachers (or even one teacher) would encourage parents to be more involved in the school.

Thus our position is that although we advocate the recruitment of Latino teachers (since nearly 12% of the U.S. school children are Latino and only 4% of their teachers are Latino) we believe that more important are teachers' qualifications. More of these qualifications and dispositions are listed under the sections that follow.

*B. The selection of teachers who have the knowledge, skills, and dispositions to teach Latino children and students who are not a part of the dominant culture.*

To improve the quality of migrant education it is necessary to tighten the criteria and standards currently used to select teachers. These teachers need to know how to teach migrant children (need to be able to construct a program of learning for these students starting from where they are, allow students to participate, and construct their own learning, etc.), need to be certified in the teaching of subject matter (such as Mathematics) and need to have excellent use of school-appropriate English and Spanish. Similarly, teacher aides should go through a rigorous selection process with clear standards (e.g. they should be fluent in English and Spanish and certified to teach; parents and well-intentioned personnel will not do as teacher-aides). Teachers need to have learned how to teach in a context with Latino students under close supervision from a qualified and competent teacher. Characteristics that make someone an excellent teacher of Latino students are unknown and more research needs to be done in this area (Tatto, 1996).

*C. The availability and quality of educational development opportunities for experienced and prospective teachers and teacher aides who will be in charge of the instruction of these children.*

Because the education of teachers of migrant children is an area that has received relatively little attention in the current policy dialogue we include here a more extensive review of policy alternatives.

*Provide context and culture relevant teacher education and professional development*

Although knowledge in the area of teaching migrant populations in this country is poor, there are some valuable lessons that educators have learned from studying efforts developed both nationally and internationally. New visions for teachers of minority populations seek to influence teachers' views of learners as makers of meaning, learning as discipline-oriented and situated in context, and the curriculum as open, flexible, and constructed by students and teachers.[41] Under this vision teachers and students need to make sense of their learning within a sociohistorical context in order to be able to teach and learn for understanding and develop a disposition to look at teaching and learning as vehicles towards a more equal and just society.[42]

A number of studies point to two conditions as the focus of teaching and teacher education and development efforts sensitive to diverse students; one, the development of a view of learning to guide teacher development efforts and, two, the formation of learning communities and the development of norms to facilitate movement towards a common purpose and facilitate communication among students and teachers, teachers and teachers, parents and teachers, and parents and students.

*Developing a view of learning to guide teacher development efforts*

The development of a view of learning to guide teacher development efforts which requires that:

- *the content and construction of the curriculum, and learning environment be developed by those who teach and by those who are taught;*
- *the curriculum and the instruction be discipline based (e.g. learn to master English/ Spanish through the learning of Mathematics and Science);*
- *the focus of instruction be on teachers' and children's sense-making rather than one imposed from outside by a program of instruction developed by and for others;*
- *both the teachers and students understand that they can and do learn from each other with teacher acting as facilitator and students learning from and with peers teaching each other preferably in a multi-age classroom;*
- *the development of high quality self-paced, self-guided materials for individual study (e.g. programmed lessons in Spanish if necessary).*

Teacher development responsive to the needs of migrant students should enable teachers to develop a collaborative teaching and learning environment. Learning to teach migrant or Latino students needs to occur among migrant or Latino children and with teachers who are experienced and sensitive to the abilities and needs of these students. Teachers need to be able to learn skills (Spanish, develop appropriate curriculum based on knowledge that children bring with them, etc.) and knowledge (Mathematics, Science, culture relevant, etc.) and acquire dispositions (high expectations for these students, e.g., these children can be very successful in Mathematics and Science since Mathematics itself is a language and learning Science under a conceptual perspective allows children to learn concepts and use manipulatives) in context this is, with migrant students and their teachers while teaching, learning and making meaning. This means that student-teachers need to intern in schools with large populations of migrant students, which may be supported or sponsored by the MDOE or other funds. Learning to teach in this context will enable student-teachers to understand and construct strategies to address the needs of these students.

This new kind of teacher education and development should favor practices in which student teachers and teachers would work together to decide practical issues that are important to them such as the curriculum, selection of books and academic materials, and the kinds of activities that may best allow significant engagement. The aim is to shift emphasis away from mere regurgitation of accumulated facts (favored by the "mind as slate" orientation) and to develop ways of understanding how students utilize and combine multiple skills in a newly challenging context.[43]

A transformation in teaching and teacher education to address the needs of migrant students would need to be developed by those who actually teach these students and by the students themselves through ongoing dialogue, consultation, application, and reflection. The development of new types of teaching and learning experiences demand guidance for successful implementation where texts, teacher guides, and a structured curriculum are essential elements. Only rarely have teachers and students been allowed to participate in the dialogue that results in the construction of new curriculum. Curricula has been typically handed down accompanied by implementation mandates. Programs that have successfully experimented with teacher-developed curriculum for peripheral populations have produced strong teaching and study materials designed to allow for social construction of knowledge by students, allowing teachers to help pupils develop new understandings based on previous learning. This has occurred in Colombia, with use of self-guided texts in multi-age groups where students teach each other and teachers serve as facilitators.

A new kind of teaching and teacher education that addresses the migrant students' needs begins with the premise that helping teachers make sense of old and new knowledge helps them facilitate sense-making in their students. Teachers will not know "naturally" how to address the learning needs of students they don't know much about or cannot communicate with; teacher preparation and guidance are needed to be successful with these students.

Teachers should not be seen as the sole center of the action in the classroom. Peers are expected to also learn by helping each other comprehend what they learn. Migrant students can contribute to others' learning of a different culture, language, and lifestyle. Other students can contribute by helping explain concepts or correcting improper English usage. Teachers and students should be encouraged to share strategies in which they (can) become (more) knowledgeable with the goal that all participants in the teaching-learning process are seen as equally contributing in the construction of knowledge.

The directions for change delineated above cannot be accomplished without the construction of a conducive learning environment in which all voices in a community of learners can be accorded important contributions towards that learning.

*The formation of learning communities and the development of norms*

The formation of learning communities and the development of norms (such as adopting the Writing Process as an approach to teach writing or a conceptual method for teaching Mathematics and Science) to facilitate movement towards a common purpose and facilitate communication among students and teachers, teachers and teachers, parents and teachers, and parents and students.

The development of learning communities starts with:

- *developing communities of teachers and individuals – within a school or district – that share common concerns and goals for student learning;*

- *norms as regards to purpose and to learning activities and actions that are appropriate for a program for migrant students that allow for cohesiveness of purpose and facilitate learning dialogue (e.g. while lecturing may be useful, conceptual learning or understanding action oriented manipulatives are encouraged);*

- *the development of ongoing learning opportunities for teachers and students designed to encourage reflection, dialogue, critical thinking, and understanding in context (teachers learn to teach among migrant children in apprenticeship programs; teachers constantly learn to improve their Spanish); and*

- *the aim of and the vehicle for a new kind of teacher education and professional development sensitive to diverse students is teachers learning together to improve their knowledge as well as to support each other in a continuous attempt to implement a different kind of teaching and facilitate a new kind of learning.*

The implementation of a new kind of teacher education and professional development and the creation of communities of teachers and learners calls for the development of rules, or norms, as defined by a community formed by teacher educators, teachers,

pupils, and their parents.[44] Just as Catholic and other private schools have created a culture around what it means to teach and learn, migrant education programs teaching and development efforts need to develop a culture that serves to guide and support teachers, students, and parents as they attempt to educate children. Although more research is needed as to what this specific culture should look like, its development needs the full participation of the community involved in this endeavor. In a recent study of an optimal learning environment (OLE Project) for Latino students, Ruiz and Figueroa (1995) offer the following set of principles for educators to guide instruction and learning based on a "holistic-constructivist paradigm":

- *offer students choices in writing, reading, and learning;*
- *activate and use students' interests and background knowledge;*
- *center learning on whole texts or projects;*
- *provide active participation and interaction;*
- *recognize that literacy is first, a meaning-driven process within which issues of form (e.g. phonics, spelling) can be addressed;*
- *provide opportunities for classroom work to have an authentic, real life purpose (write a book or a real letter);*
- *accept and acknowledge students' developmental approximations toward learning;*
- *immerse students in a language-and print-rich environment;*
- *give demonstrations, not just directions, of the literacy and learning that needs to be done;*
- *respond immediately and in a personalized manner to pupil work products or journal entries (rather than a give a letter grade);*
- *create a sense that the classroom is a community of learners, readers, writers, and speakers;*
- *raise your expectations, and those of the students, of what the students can do (Ruiz and Figueroa, 1995).*

A beginning point in formulating this culture is the development of a clear theoretical and philosophical position to guide the development and implementation, and to insure the continuity of teacher education for migrant children. Research on teacher change argues that positive dispositions and knowledge development towards diverse students are likely to occur when teachers instruct in a context that requires them to be in contact with this population.

Learning opportunities for teachers congruent with a context specific approach asks student teachers and teacher educators to reflect and challenge traditional conceptions of the teacher role, the learners' role, subject matter, and pedagogy.[45] Teacher education experiences and opportunities to learn would be expected to allow teachers to learn to teach in context with support and mentoring from program staff and from other fellow teachers.[46]

*Increase the length and depth of professional development efforts*

Substantial professional development efforts should include both high frequency (e.g. once per year) and be of enough duration (e.g. close to or longer than a month during Summer) to guarantee appropriate use of curricular materials, in-depth knowledge of the culture, and so on. The typical in-service sessions currently given to teachers are short and lack depth. We do not have enough data to talk about in-services provided to teachers by the migrant education program, but an evaluation of these in-services might provide important guidelines for improvement.

*Move towards an independent learner model*

Develop and apply strategies that help students become independent learners, able to read and learn on their own regardless of the language in which this occurs. Technological advances in computers and software, but also self-guided textbooks, can help these children learn on their own and provide an important support for teachers in the classroom.

*Mentoring and monitoring systems*

Development of effective and continuous mentoring and monitoring systems for teachers and students would help improve and maintain quality teaching and learning. These systems may help program implementors improve their practice and provide feedback they can use to improve themselves rather than as means to punish or withdraw support and funds. It is important to remember that learning to teach is itself a process. Monitoring becomes a means of continuous support and challenge by and for teachers.

*The need for fundamental school restructuring*

The improvement of the education of migrant children may need the invention of a new institution (e.g. distance education approach or an exclusive school for migrant children) or a fundamental restructuring of the school environment as we know it to support teacher efforts to develop innovative strategies to teach diverse students and to effectively provide access to migrant students in regular schools. Although we suspect that migrant students are kept at the margins of classroom activities and tend to underutilize school resources (such as computers, texts, teachers, peers, etc.) we do not know how and why this happens. Not knowing or understanding the dynamics of migrant students' participation in the process of schooling makes it difficult to make any intelligent recommendations to address these students' actual problematic. We do not know at this point what would need to be different (e.g. hire more school savvy teacher aides, provide in depth workshops to a critical number of teachers to help them manage migrant students, develop explicit guidance mechanisms for teachers and students to engage in conceptually meaningful learning tasks). We recommend an exploratory study guided by a sound methodology before mandating policy.

Segregation strategies such as ability grouping, tracking, placement in special education classes, or placement with learning disabled or other students with learning difficulties are over-used and have proven ineffective. Migrant students are different mostly because their language is Spanish and because they move around according to the seasons, but they are able to learn given a fertile environment. Not being able to speak English fluently does not imply a learning disability.

*Develop accountability systems to monitor resource development, allocation and use*

There seems to be a need for the adoption or development of materials of high academic quality curriculum developed both in English and Spanish that cold serve both as a connection among the students and the teacher, the student and the parents, and among students themselves. Self-guided textbooks should be seriously considered here as should materials developed in Mexico, such as those included in the government-produced free textbooks and the *telesecundaria* programs. Sesame Street, or in Spanish *Plaza Sesamo*, is an excellent instructional program broadcast in Spanish in Mexico. To do this, more funds need to be allocated to curriculum projects and accountability systems to monitor that funds are dispersed as intended. Only 4% of the budget currently allocated for migrant education in Michigan goes to curriculum projects.

From interviews with migrant education specialists in Michigan it is clear that many intelligent ideas of alternative forms of schooling directed toward migrant working families have been attempted. Concepts from distance education and traveling schools have been reported to have had success in Michigan.

Outside Michigan a number of potentially useful resources have been developed: *Teacher Resource Guide for the Development of Positive self-concept in Migrant Children*, MACRO Education Associates; *Building Self-Concept in the Classroom*, P. Higgins, The Northwest Clearinghouse for Gifted Children; *Preparing Teachers for Working with Children of Migrant Families: Building a Home-School Connection*, Mary Bradford, Nova Southeastern University; and *Help! They Don't Speak English Starter Kit for Teachers of Young Adults*, Virginia State Department of Education, Migrant Education Program. These are but a few that are available. Unfortunately these resource, and others, are not always easily accessible to teachers. These guides attempt to give teachers background information and insight on migrant education students, and the goal is to provide practical suggestions to be used in class.

In the two schools we visited, resources were supplemental. They did not seem to be integrated in the "regular" classroom. Since the "regular" classroom teacher usually has final say in the choices of what resources to use, how to use them, and by whom, efforts need to be made to ensure these resources are available to all students and teachers. We were not able to obtain curricular resources, guides, or guidelines from the MDOE or from other sources to guide teachers and teacher aides of migrant education students. We wondered whether a department that does not create or encourage its own resource guides could effectively evaluate and make easily accessible those of other states.

*Policy Implications*

From our preliminary investigation we conclude that teacher policy vis-à-vis migrant students, at least at the local level, has been poorly conceived. It has been dominated by special interests and ideology whereas information that could help explain this issue better has been largely ignored. This was evident during our field trip when an administrator pointed out that the kind of conversations we were having with the students rarely happen.

Something similar occurs with the teachers of these children. When asked, teachers said that self-instructional guides and texts for migrant children would be a tremendous help to them and would avoid children's learning delays at school. How often have these children and their families been asked what would best help them in their learning? In sum, this population has not been seen by policymakers and schools as learners, but as uncritical, powerless recipients of services designed by – but without – them. Even moving to a more formal level we could probably ascertain that few serious evaluation studies of these programs have been made (see the 1993 evaluation of the program available through the MDOE, Migrant Program Office).

The lack of timely, reliable, and pertinent information not only about processes, but also about inputs and outcomes, are serious indicators and barriers to running (or improving) an effective program. We recommend the development of a series of pilot studies that determine what exists and recommends where to go. More information about what is currently being done, and about the policy instruments more appropriately supporting teachers and students, needs to be studied. It would help balance the interest and ideology-charged agenda regarding this policy. Principal policy instruments have been directed towards compliance, mandates, and incentives, but little else in the direction of human resource development. This situation points again to the importance of investing in the education, professional development, and guided support of those individuals who work with this population.

## Rethinking Family Involvement in Migrant Education

*Research Questions*

We have observed that there is little communication occurring among the schools, their migrant student populations, and these students' families. In fact, it seems that families have little access to their children's learning, teachers, and schools. We are therefore prompted to ask; how involved are migrant parents in their children's education in comparison to mainstream parents? What is and isn't contributing to this? Are mechanisms in place in the schools which encourage parental involvement? If so, what are they? What is happening at the local level? How do parents find out about things? Are schools accountable to parents? How can parents be accountable to the schools for their children's learning?

A distinguishing element of the migrant worker population is its mobility. Like most nomadic peoples, migrant workers have more than one home, move several times a year, and keep their children with them. Given these additional characteristics, can we realistically expect these highly mobile parents to be engaged in their children's education, when their main purpose is to make a living in agriculture? Hence, we have also asked ourselves how education can be more "organic" for the migrant students and their parents. Are there ways to make education a part of the migrant family's daily life? In other words, are there ways to develop close connections between families, communities, and schools?

*Contextualizing the problem*

Parents and children should expect schools to be places where people have the opportunity to learn,

and where knowledge is transmitted between students and teachers. In the case of the migrant child, opportunity to learn is mitigated by funding, language deficiencies, lack of available resources – including well-prepared teachers and good textbooks – and low parental involvement in children's education (Carger, 1996; Fieldnotes, 1996).

Like any child, the migrant student comes to school already knowing something about the world and about academic culture. We suggest that the migrant student understands mathematics, language, art, science, history, and other subjects constituting the normative curriculum of any school day. Yet, migrant children are often viewed as *tabula rasa*, a person who knows nothing until schooled in the American system or according to different states' expectations, or most importantly, not until they have mastered Standard English and mainstream school culture. This calls into serious consideration the notion of socialization of the migrant families into the American mainstream. Our migrant students are being socialized as if they come to Michigan from Texas, Florida, or Mexico without any previous knowledge. This is problematic and deserves immediate attention.

There are regions in Michigan where 25% of the school population consists of "settled-out" and migrant workers' children (Fieldnotes, Sept. 30, 1996). These children often come from poor, traditional Latino families whose prerogatives are to provide enough food, clothing, and shelter for their children and their relatives back home. It is true that the parents do not migrate across the country in order to provide their children with the best education, yet it is clear that they desire, and have a right to receive, an education for their children (Interview, Sept. 30, 1996). They also want their children to have access to resources, a quality education, teachers who can mediate between American and Hispanic or Latino cultures, and that their children not be considered "special needs" students because of English deficiencies (Interview, Oct. 21, 1996).

In turn, the children see the hardships and struggles their parents undergo while living at or below the ($9,000 per year) poverty level. Older children often skip school to provide childcare for younger siblings; they work in the fields when adult relatives cannot work because of illness or injury (Fieldnotes, Oct. 14, 1996). These migrant children have often been in school in Mexico or somewhere else in the U.S. The system is such that the privilege of education is politically driven and ideology prevails over information when developing policy.

According to school administrators and teachers at our two field sites, among migrant workers there is a healthy respect for the school and institutions like it. Teachers report that parents generally do not question what schools do or what teachers teach. They often assume that the teacher knows what is best for the children. One teacher, who was also the director of a summer migrant program reported, "I'm very interested in engaging the kids in hands-on activities because they can simply disappear in the classroom. The kids are very quiet and disciplined and it's easy for the teachers to ignore them" (Fieldnotes, Oct. 14, 1996). The migrant students have been taught to respect their elders. This could actually set them back when respect is understood as complacency and lack of assertiveness is misunderstood as lack of motivation. If teachers lack the skills and resources to engage the migrant students in their school work, they run the danger of becoming invisible in the classroom. When parents finally discover their children are not achieving by school standards, it is usually too late to intervene. The costs are high; the drop-out rate in Michigan is close to 50% at the middle and high school levels (Fieldnotes, Sept. 30, 1996).

Conceptualizing migrant education as a problem of integration and socialization can serve as a frame for discussing questions integral to public education in general, and specifically family involvement in schools. Parental involvement is important. In accordance with the statements made above about the integration of migrant students' prior knowledge and family and community involvement in the schools, the "Goals 2000" report states almost one-third of public secondary school teachers rated strengthening parental involvement in their children's education as the most important educational policy in the coming years. Also, the report indicates, 40% of parents do not think they are spending as much time as they want on their children's education. Developing close connections between migrant families and schools will not only parallel our national goals, but also serve to maximize learning opportunities for everyone, including teachers, students, parents, and administrators.

*Defining the problem*

To better understand the kinds of values that most Hispanics and Latinos hold with regard to education, we decided to consider two reputable sources other than our field research from the vast array of available materials. One is an ethnography about a family's experience with public schooling, and the other examines American conceptions of Hispanics and Latinos. These two sources, plus our field notes, give us a more comprehensive portrait of migrant education and the problems that migrant workers and their children are likely to face every day. Finally, at the end of this section, we shall discuss the gender dynamics that we encountered as we encountered various people involved in migrant education. Gender relations are an important dimension to consider in Hispanic and Latino culture as they can impact strongly on the mother's role toward her children's education (Interview, Sept. 30, 1996).

In her book *Of Borders and Dreams: A Mexican-American Experience of Urban Education*, Carger examines the experiences of one family who moves illegally into the United States from Mexico and ends up in Chicago. Carger is especially interested in explaining why this family's oldest child, Alejandro Juarez, does not succeed in school. Many aspects of Alejandro's educational experience mirror those that we heard about in our fieldwork. Although Alejandro's family did not migrate to work in the fields, his parents were factory workers and could not easily connect or understand American school demands. In fact, Carger points out, Alejandro's parents respected the schools too much to intervene, believing that they were doing their best for their child, even as they witnessed his increased confusion and frustration. A strong family that usually worked together through everything, Alejandro's family could not cope with his schooling.

One main characteristic of migrant families is that they often work together in the fields. Carger argues that the Juarez valued working together, while Alejandro's schools valued individual responsiveness.

In an anthropological and ethnographic sense, Alejandro experienced incongruities between his home and school cultures. As other cross-cultural researchers discovered (Au, 1980; Au and Mason, 1983; Emerson 1983; Gibson, 1987; Heath, 1982, 1983, 1986; Phillips, 1983), Alejandro's way of learning and familial values differed from those esteemed by traditional educators. Learning through observation, supportive gradual mastery of skills, cooperation in tasks, and collaboration in negotiating life's everyday trials were emphasized by a large family accustomed to working together. Yet in school, tasks were assigned with little emphasis on modeling, individual achievement was prized, and collaboration for support was viewed negatively, as cheating.

Carger later pointed out that Alejandro's parents could not relate to the schools' expectations and the school understood their lack of involvement. This was in large measure due to the fact that the Juarez were not literate in English.

Although intensely supportive of his education, Alejandro's parents are unaware of how to facilitate his school success. They are vague in their career expectations for their son, although they are clear and emphatic in their desire for him to pursue better jobs than they have experienced. They repeatedly encouraged him to develop his English abilities by conversing with native English speakers in their new neighborhood. They lectured him on behaving in school and listening to teachers, even when they expressed doubts about teacher behavior. They also recognized the importance of having access to books and encouraged him to go to the library. However, both their own and Alejandro's reading problems and unfamiliarity with library practices greatly hindered what he could accomplish there on his own.

These short vignettes from Carger's book, we think, illustrate the disconnectedness between school and home for many Hispanics and Latinos and especially migrant workers. Many schools and families do not have the necessary "cultural capital" to work together and connect in a productive way to address their students' needs, yet Hispanic and Latino parents "express considerable satisfaction when a teacher makes an effort to involve them in their child's academic development" (Goldenburg, 1996).

Equally important is Linda Jackson's *Research Report #10*, published by JSRI at Michigan State University, on stereotypes Anglos hold about Hispanics and Latinos. Her study shows Anglos perceive Hispanics and Latinos as having fewer

positive characteristics and more negative characteristics than Anglos. To corroborate Jackson's data, we learned in our field research that some migrant program aides do think of migrant students as "slow" and "lazy." On the other hand, the aides also reported that parents are very involved. "They want to know what their kids are doing and they want their kids to be respectful. The migrant students are more respectful than the other kids" (Oct. 14, 1996). However, we also found that the teachers are usually the ones to contact the parents and since most teachers do not speak Spanish, they often ask the ESL or Spanish language teachers to act as intermediaries. In effect, we find that perceptions of the Hispanic and Latino students are somewhat mixed.

In one school district, the Migrant Education Director commented that "the migrant population is not well received nor welcomed in western Michigan" and that this was a daily struggle for families (Sept. 30, 1996). However, all of our field sources told us that they are optimistic and positive of migrant students' potential for academic success. We think there needs to be a more definitive study of the effects of Anglos perception of migrant children's education so parents and teachers can be more attuned to ways of helping their children cope, as Jackson concludes.

This last section addresses gender and how it might impact on migrant parents' involvement in their children's education. Mothers, across many cultures around the world, are responsible for rearing and teaching their children how to survive and succeed in the world. Hispanic and Latino families are no exception. Mothers in the often extended families tend to the children; they are generally the ones to participate most often in their children's school activities, including parent and teacher conferences, Open House, volunteerism, and other school and parent activities (Tatto, Edwards and Garcia, 1991).

At one school district we found that migrant mothers, if they have time off work, also volunteer or work in the schools to be near their children. This may pose a problem for fathers, who expect their wives to remain at home instead of working independently outside of the home.

Although we need to do more research to understand family dynamics among migrant workers, we think the role of women and, increasingly, men are potentially significant in the connections parents make in their communities and schools. Parental involvement means integrating both parents' values and expectations with those of the school. More research needs to be done to determine whether fathers' views can have negative effects on family involvement and, especially, mothers' involvement in school activities.

*Policy Alternatives*

We discussed several strategies for getting parents more involved in their children's schooling. In one school district we were told that with more Hispanic and Latino teachers being hired, parents would be more likely to participate in and gain more information regarding their children's education because the teachers would be able to relate to the parents both culturally and linguistically. At another school district, we learned that the parents and their children were well integrated in the community even if the parents are not able to communicate with the teachers. We also learned that when efforts are made to offer ESL classes by the community in this district, most parents do not have time for them.

What we saw in these two communities are efforts to both integrate and separate the Hispanic and Latino migrant communities from the "mainstream" community. Both districts are interested in teaching the students Standard English, but one school district is also more interested in maintaining a strong Hispanic and Latino community and culture by making sure that students speak "good" Spanish instead of the "Tex-Mex" dialect of Texas.

We think the differences in the two districts are ideological in nature. They are driven by the fact that, in one place, the administrative leadership positions are almost entirely held by Hispanics and Latinos, while in the more rural district there were no Hispanics and Latinos leaders. The researchers we met at MSU and at the State Department of Education advocate strong bilingual language skills for the migrant students, even if the parents wish their children to speak only English.

MDOE researchers also suggested that year-round schooling with a centralized curriculum across several states would improve the migrant students' achievement potential. Better school supplies and books are needed and finally, they think, teachers need to be better trained, i.e., speak Spanish and use bilingual methodologies in order to better teach migrant students and communicate with their parents. They also added that radio programs designed to educate migrant families about health care, academic subjects, language skills, and important information as they work in the fields would probably be the best way to link the parents to their children's academic lives (Interview, Nov. 4, 1996).

*Policy Implications*

First, we note a set of characteristics given to us by the MDOE researchers to describe migrant students and their families.

These characteristics illustrate the importance of positively connecting the school to the families as a way to promote student achievement and strong community ties. Second, our frame of reference has been informed through an integrated view of published policy research and fieldwork during the fall of 1996.[47] Third, although we are better informed about the problems that migrant education programs face, it should be noted that our recommendations are not fully based on comprehensive factual information such as costs, politically driven agendas, or other factors not mentioned.

Although we agree with the MDOE researchers that a centralized curriculum and year-round schooling is the best alternative for promoting migrant academic achievement, we are rather skeptical that this will occur soon and we are not certain how it may affect family and school relations. We fully support the idea of opening summer school programs as ways to transmit the basics and for enrichment purposes while families work out in the fields. The recommendations we make point to general strategies of action rather than specific guidelines for policy implementation. Table 1 outlines our Ambassador Student Council Program.

We first propose that the migrant students become ambassadors to their schools in representing their families. This means migrant students will be responsible for facilitating communication between their families and teachers, but will do so with the help of their teachers, local migrant education recruiters, and their churches.[48] They will, in fact, be the intellectual and social conduits their parents and schools need in order to learn from and about each other. This facilitating role will grow out of a strong support structure at school that we hope will eventually extend into the home. We also suggest that, wherever possible, the older migrant students

***Table 1. Suggested Mechanisms for Ambassador Student Council Program***

- **Migrant, "settled-out," and other interested students will form Student Ambassador Councils with the help of a school staff advisor.**
  - √ **They will establish ways of communicating concerns to the schools and the families.**
  - √ **Students will facilitate communication between families and teachers.**
  - √ **Support will come from teachers, migrant education recruiters, and local churches.**
- **Schools will provide a culturally sensitive staff to address diverse cultural and linguistic needs.**
- **School will provide information, homework, and supplies like pencils, pens, books,and notebooks.**
- **Older migrant students will represent their elementary school siblings at their meetings.**
- **Students will meet with teachers and be informed of their siblings' progress.**
- **E-mail communication among Student Council members across the country will foster intra- and inter-state community building and will alert members to new incoming members.**
- **Both parents will be urged to participate in and learn from school-sponsored activities.**
- **Students and teachers will be encouraged to review published literature about diverse populations as a way to begin renegotiating and rethinking learning and teaching practices.**

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become ambassadors to their elementary school siblings by volunteering to "check in" with the teachers and be well informed of their brother and sisters' academic progress. In turn, we stress the importance of having a culturally sensitive staff who supports diverse ways of learning and teaching. The school will have to reinforce through staff development, and access to published research about Hispanics and Latinos, and visits from migrant education recruiters the notion that Hispanic and Latino students have much to contribute, and that they do come to school with useful knowledge and ways of learning that can benefit others. Migrant students and their teachers will also have to learn within their supportive environments how to relay information between school and home. This may be done by parents, students, and teachers in church as a way to convey information to everyone in the migrant or "settled out" community. This means that the students will have to make efforts to learn school culture and knowledge in order to teach it to their parents. Their teachers, language aides, and school librarians will act as principal guides in providing outreach to the parents in the form of letters, information, homework, and supplies.

Second, our student ambassador proposal is more likely to work if the migrant students, other Hispanic and Latino students (such as the "settled-out" students), and any other interested students are able to meet on a weekly basis to discuss how to be school ambassadors. They will function much like a student council and should have a school advisor – a teacher or parent who is supportive of the program, is familiar with Hispanic and Latino cultures and languages, and who will have access to some school funds – to guide them as they deal with administrative issues. These student ambassadors are then enabled to work together to address the issues affecting them. They can establish communication between schools and parents, and form an integrated community with common concerns.

Third, we realize that the biggest factor affecting migrant families and their schools is the high mobility. We suggest that ambassador programs be implemented everywhere there are populations of migrant workers in Michigan. We also suggest that these same mobile students help schools form similar programs either in Michigan or other states. We think that the consistent presence of the "settled-out" students will promote greater stability in the ambassador program. With electronic mail becoming more available, students will be able to access each other and link to schools. Once this program is instituted, there will always be available ambassadors to welcome any newcomer into the community.

Fourth, we think this active interaction radiating from the students as focal points of action will make for easier transmission of school knowledge and skills. The council of ambassadors may function as a study group and a political voice mediating among the migrant students' academic concerns, the school's expectations, and the parents' needs to be better informed about school culture and knowledge.

Fifth, migrant mothers and fathers will need to feel welcome and wanted by the school. Again, this can be facilitated by the student ambassadors. One student shared why she is compelled to succeed in school; "I want to be somebody so that I can help my parents out. My paycheck always goes to my parents and I want to help them so that they won't have to work in the fields. I like to be in the same school where it's small and I can get to know other Hispanics" (Sept. 30, 1996). There is no question that the migrant students would like the opportunity to help themselves and their parents. As the primary facilitators of communication between school and home, they will not be the passive recipients of policy enactment, but proactive members of an integrated system of learning and positive growth.

Finally, because there are many stereotypes that people hold about Hispanics and Latinos, we encourage student ambassadors and their teachers to look to the published research concerning diverse populations as a way to begin to renegotiating and rethinking existing learning and teaching practices. Michigan, for example, could make many of the JSRI informational documents more available and accessible, in English and Spanish, to all the schools with concentrations of migrant or Hispanic and Latino students and families. Student ambassadors could then discuss and share this information with parents and develop ways to negotiate the system.

We base our recommendations on the fact that we have not been able to find or to recognize school mechanisms which function to promote migrant family involvement in their children's education. We think that our general aims in the student ambassador program are likely to generate an "organic" mechanism for establishing a rapport among the migrant students, parents, teachers, and administrators. We believe that the connections made between school and home are crucial for the academic success and socialization of migrant students into American school culture.

We are also careful to note that deep prejudices exist in the American and Hispanic and Latino communities which may hinder these students' academic progress, and we are therefore interested in developing more useful ways of "training" qualified teachers, administrators, and parents to teach the nation's fastest growing population, Hispanics and Latinos (Interview, Oct. 21, 1996). We are concerned that migrant students are often considered "blank slates" because they may have language deficiencies in both Spanish and English, so we are eager to dispel such notions and suggest that our intuitions or ideologies be based on a wider variety of information and data. We recognize the importance of providing a good education for all students. By encouraging migrant family involvement in schools, we believe we are echoing our national goals of promoting a more enriching educational environment.

*Uses of technology*

The education of migrant children in Michigan presents a challenge for the nation, state, and local communities. At the federal level, migrant education receives special funding to the states as a supplemental education program for students identified according to specific criteria. In Michigan, federal funds and special state grants are distributed to the intermediate or school districts which, in turn, use the money in various ways (i.e., special offices, summer programs, special classrooms, and teachers' aides). Technology is one avenue whereby the education of migrant children can be served better.

Technology can be useful administratively and educationally. The latter, technology for learning, is the primary focus of this report although it includes comments on the administrative uses of technology for migrant education.

Increasingly, all schools are using computer technology for administrative and educational purposes which is to benefit students, parents, families, and teachers. For migrant children, computer technology could serve to identify previous school locations and periods of school attendance. Schools could be contacted directly and information exchanged on what the child had covered and missed in the curricula, thereby recognizing that migrant children are not a "blank slate," but bring with them prior knowledge and learning from home, previous schools, and the work environment. Such exchanges of information could identify what texts and materials were used, any special needs, and, in some instances, even the student's electronic portfolio.

As teachers integrate the use of computers to access the Internet in the classroom, migrant children can act as classroom resources for developing internet projects with the teacher and classmates, and construct links with other schools and sites which utilize language, culture, and traditions. Classroom internet projects demonstrate how children are constructing their own learning through collaboration with classmates, teachers, and others on the Internet – activities which can break down ethnic barriers and foster inclusion for minority children. Other types of technology, like software, teleconferencing, programmed texts, CD-ROMs, and multimedia programs are all resources that could be effectively used to help migrant children attain educational needs. How well these goals could be achieved will depend upon certain conditions being addressed by migrant families, teachers, and the community, state, district, and federal programs.

Although not the main thrust of this report, the use of technology for record-keeping purposes can also support the migrant child in getting an education if the U.S. databases are used concurrently to store and generate information on students so that institutions, administrators, teachers, and students can better use that information to facilitate decision-making. For the migrant child whose family may move several times a year, a more secure, efficient, accurate, up-to-date tracking system for educational and health records could be of great service, even necessity. For example, repetition or lack of vaccinations could be harmful for both the migrant child and the community. In transit, original paper records and documents can easily be lost or destroyed, so that entry and transition into the new

school sometimes occurs without verification or evidence of prior records. Keeping an electronic record, which new schools could easily access, would help in assessing the needs of the migrant child vis-à-vis the new school community.

## Technology for Learning

*Overview*

Personal computers and connections to the Internet have the potential to dramatically change the character of traditional education. "As increasing numbers of schools become equipped with personal computers connected to the Internet and the World Wide Web, children of all backgrounds and from all regions are reaping the benefits."

Federal, state, and business programs are providing other multimedia technology opportunities for schools located throughout the country and documenting the results. In Florida during 1996, under the auspices of IBM, the University of North Florida, and the Duval County Public School District, the "Lone Star 2000" project began bringing new educational technologies to selected classrooms within the district using new hardware, selected software, CD-ROM technology, and multimedia presentation tools. The elementary school's focus is on exploring math and developing language and writing skills while the middle school focus is on Renaissance culture and North American history.

The Lone Star 2000 partnership revealed that when "groups, composed of corporations and university and public school personnel, work together within partner schools, barriers come down, visions and perspectives change, and corporations, schools and university are open to change."[49]

Wayne, a rural Nebraska school district, has developed a multi-faceted technology service in just three years. The school board and technology committee, comprised of members from private business, Wayne State College, the Nebraska Department of Education, and the local school district, has been working together to motivate and implement a number of projects. Most notably is a distance education high school Spanish III course having a 2-way, multimedia link in real time with a school in Juarez, Mexico. This project failed due to problems in Mexico; however, Spanish instruction is still provided through a satellite downlink for grades K-3. In 1994, U.S. West, a regional telephone company, supported technology awards which provided 20 laptop computers for fourth graders to take home and use for assignments. "A critical factor in the success of the overall [technology] project is the cooperation of the faculty and staff of the Wayne Community School District."[50]

At the federal level, the Office of Bilingual Education and Minority Languages Affairs funds many programs which have technology as a primary component. There are regional contacts for each program ranging from program development, implementation, enhancement, comprehensive school grants, system wide improvement, through academic excellence awards.

Another prestigious project is the U.S. Department of Education's Star Schools Program. The program consists of a series of videotapes (1995-96) specifically on 'building capacity within migrant families' to support education for the migrant community, in addition to other series on math, physics, technology tools, science, multicultural learning environments, and case studies.[51]

The Educational Systems Programming at Northern Arizona University provides another aspect of the Star Schools Project. In partnership with ETC, they will continue their award-winning elementary Spanish for Grades 1-6 on the Learning Channel for nationwide K-12 schools in 1996. This includes printed support materials, an interactive CD-ROM, and access to their website and bulletin boards.[52]

The following positive findings are based on the first formal evaluation of the Star Schools Program:

1. Over 30 separate full courses are offered that... include Spanish, mathematics, science, and advanced placement English.

2. Students in 10 major urban areas, have access to curriculum and instruction that supplement their classroom experiences. These supplemental courses, mainly in mathematics and science, involve students in hands-on activities and provide models of best practice to their teachers.

3. Star Schools activities were generally more successful in schools and districts that were committed to the success of distance learning...

4. Teachers reported an increased use in cooperative learning and multiple technologies.

5. Participating teachers and facilitators cite exposure to students in diverse communities as a value of the distance learning program.

*Some of the drawbacks reported are:*

1. The 2-year funding limitation continued to present a severe limitation on project activities.

2. Alternative, more focused, and more effective models of staff development are seldom used in the Star Schools Program.

3. Star Schools projects do not attend sufficiently to school-site concerns and, therefore, are not as successful as possible.

4. Star Schools activities tend to replicate existing classroom structures and processes rather than explore uses of distance learning to create classrooms that enhance students' opportunities to construct knowledge.

A highly effective and low cost use of technology can be seen in a number of international programs providing basic education in multigrade classrooms and using a child-centered approach to learning in language, writing, and math skills through self-instructional text materials. These are made available through education offices to the schools, students, teachers, and programs, such as the *Escuela Nueva* Program in Columbia. In most cases, support for the student is provided through distance education, local school personnel, or a more knowledgeable adult in the community, such as the RADECO Program in the Dominican Republic[53] (see Appendix 1).

Technology use for classroom learning presents problems for minority learners and special populations in gaining access as well as addressing the equality of access. This includes links to both computers or to other simpler, but highly effective, technologies such as textbooks, educational radio, and television. Migrant children, a portion of the Latino population, are already marginalized in terms of computer access and use. The proportion of Latinos with access to computers doubled between 1984 and 1993 from 5% to 12%, according to a JSRI report, but non-Latinos' increased access rose from 16% to 35%. In 1993, half of Latinos enrolled in school used computers; non-Latinos had higher rates of use. Therefore, specific efforts must be made and implemented to include and actively engage migrant children in using computers for learning.[54]

## Technology and Michigan's Migrant Children

One school district, under the auspices of a grant, has started a project to establish direct links electronically with a state in Southwest Mexico where, reportedly, many of their migrant families originate. In this instance, the Michigan location, which already has networked computers, is providing and installing networked computers at the Mexican site. The focus is on exchanging information and promoting computer use for Latinos. This project deserves careful attention, clear documentation of its processes, and realistic, continued support in its initial stage so it can continually and effectively serve migrant children.

In terms of computer access and use in the Michigan schools and classrooms, there is a strong, though limited, effort to provide the hardware, software, and Internet connectivity. Generally, in rural areas where migrant children attend school, this access may be more limited than in other urban sites. Teachers express a desire for greater opportunity and some have requested more training and technical support (field visit interviews, Oct., 1996).

Given the mobility of the migrant children, there is no guarantee that their access and use of computers will increase, but they can learn to use standard software programs in school. Then, wherever and whenever access is available, they will be able to work independently. Furthermore, it is noted that the migrant families' living and work environments primarily support, or at least allow, the use of audio technology (e.g., radio, possibly cassettes). Educational radio programming is an effective tool for education that does show positive results (Edgar Leon, personal communication, Oct., 1996).

Audioconferencing for distance learning has also become effective as television use can be constricting since it requires time to sit and watch. The same may be said for using computer technology out-of-school. However, educational television programs could be broadcast during evening hours and on non-school days. Hence, television should not be discounted as an effective tool in promoting learning.

Project SMART, a migrant education distance learning program conducted in 1996 that linked Michigan and other states with Texas public television broadcasts via satellite, provides highly skilled television teachers who interact with migrant students and local teachers to promote specialized learning with relevance to the migrant students' experiences. This kind of program should be encouraged, carefully studied, and data collected to show how it has effectively helped: (a) Michigan's migrant students to improve their skills in English, Spanish, and math; (b) local teachers to better understand better and positively respond in guiding these students in their learning; and (c) school or department administrators recognize and address barriers to migrant education programs in this state.

The careful design and use of simpler technologies such as textbooks should not be discarded, but considered very seriously. Well-designed textbooks promote self-paced, child-centered conceptual learning. Textbooks provide a ready guide to parents and older siblings who would like to help their children at home and under a flexible schedule. They offer regular and bilingual teachers formerly unavailable resources to guide children in the learning process, rather than letting children linger behind classmates because of difficulty in bridging the communication gap or overcoming teachers' dependence on often poorly-qualified teacher aides. Finally, textbooks are easy to transport, provide the child opportunities to revisit previous topics covered, and are the least expensive technology around. The combination of written materials and face-to-face instructional sessions has proven an effective method to provide education to mobile populations or those who cannot attend traditional schooling (Tatto and Kularatna, 1993).

*Conducive conditions for learning with technology*

A number of conditions support the development of effective learning environments for migrant children when using technology. These conditions also are necessary for the implementation of many migrant education programs.

First, there needs to be an understanding of the media for both electronic and paper-based technology, a desire on the part of the migrant learner to use the tools, and these tools must be easily accessible. Secondly, the family's support for the migrant students and, moreover, the opportunity for their participation alongside the learner, is indispensable in providing supplemental and continuing migrant education programs. Technical support for equipment set-up and maintenance for the student and the teacher is essential for electronically based technology tools. Usually, when an another experienced teacher is not on-site, immediate and direct telephone links with a support personnel is important. The same also holds for paper-based technology tools, like programmed textbooks and materials, but often an accompanying guide can act as a problem-solving resource.

Another important condition is having training and "just-in-time" instructional support for the teacher in planning and implementing learning activities, which integrate technology use in the classroom. E-mail, web sites, bulletin boards, and ListServs can be very useful for the teacher integrating technology in the classroom. On-going documentation of the processes, involving migrant students, in using technology for learning is vital. It helps determine whether these students do have access to the technology. Further, there is a need to record how these students use the technology to achieve their education and to record the successes and failures in programs which purport to help the migrant learners to accomplish that goal. Finally, regular, continued funding is necessary for projects which demonstrate fewer failures, or more valued successes, for the migrant community and the school.

It is important that migrant learners and their families be invited to express their ideas, opinions, reasons, visions for their own education goals, and how they feel the programs are addressing their needs. In response to the students' contributions, the teachers or persons who work directly with the students should set forth their comments and analyses on the workings of the projects. Administrators should then offer support in addressing the requests for assistance and improvements from the persons directly involved in the migrant education programs, the learner and the teachers.

*Migrant education national database*

The federal tracking of migrant students and shuttling academic and health records from district to district was accomplished, until 1993, by a mainframe computer in Little Rock, Ark. This data base – known as the Migrant Student Record Transfer System (MSRTS) – handles information on about 600,000 children who are currently migratory or who have been within the past six years (now legally set at three years) and are eligible for federal migrant education assistance. States, using federal funds, employ hundreds of migrant 'recruiters' to document students in the data base (Trotter, 1992).

With the loss of this federal tracking system, school districts, schools, and teachers have no means of documenting migrant students' health and academic accomplishments. Even though schools did not have direct electronic connections to this database, school officials could contact the Little Rock office and get immediate responses for information (Field interview, Oct., 1996). School officials should attempt to emulate existent student tracking systems. Some Michigan universities already track types of student information electronically. Michigan State University uses a fully integrated, on-line Student Information System (SIS) which supports telephone and computer enrollment and maintains all student-related information.

A project is underway to address varying global academic credentials – where a master's degree in one country may only equal a bachelor's degree in another. The Global Alliance for Transnational Education (GATE) and American Association of Collegiate Registrars and Admissions Officers (AACRAO) plan to develop a global academic credentials database with information on each country's accrediting body, educational institutions, grading scales, and admissions requirements.[55]

Some technology experts recognize the objections and hesitations of having personal information stored in databases – the loss of control of that information and the potential misuse or abuse of it by federal, state, and other authorities. Even though legal systems have not kept pace with computer technology, as in the field of medicine, there are legal obligations for those who have access to, and use, such information. There are also increasingly sophisticated security measures which can be imposed to protect that information.

In Michigan, the loss of the federal tracking system for migrant children (MSRTS) has been reported as a very serious situation. It leaves school and district officials without means of verifying or obtaining migrant student information. They presently rely on 'recruiters' or migrant children and their families to provide the information, which may be incomplete. Then, school officials must contact the previous schools to get the required or additional information, all of which takes time, effort, and human resources.

Through a State of Michigan 3-year grant, Laurencio Peña at Western Michigan University (WMU) developed a pilot system for record tracking by setting up an ACCESS database on a server at WMU that could be accessed through the Internet. It is ostensibly for Michigan only, but could be of service for other states as well. It relies on schools sending information to WMU on diskettes or as hard copies since few schools have no Internet connection.

*Conclusions*

The problems of migrant education in Michigan are complex. In terms of technology, as in other ways, the policies seem to exhibit implementation processes which are effected in a top-down manner. It seems that the federal system of record tracking was imposed in that fashion and used primarily for numbers' tracking. At the local level, individuals reportedly want and need such a system primarily for information flow and exchange purposes. People directly working with migrant students express their desires and needs for educational information regarding specific students, school programs, curricula, textbooks, and other materials.

Even with regard to computer technology access and use by the migrant students, it seems as though a top-down approach would not be beneficial. Rather, an approach which starts to investigate the needs and problems of the migrant child in using computer technology for learning at the lowest level (i.e. with the teacher in the classroom, the social or community or church facilities, if not at all possible in the home or work environment) is preferable.[56]

There are many educational technology projects addressing students with special needs, some of which include migrant children, and there are software programs (content-specific and basic skills development) available for use by all students. These need to be studied carefully to evaluate their appropriateness and effectiveness for the migrant child. For example, one Star Schools-USDLC program offers Spanish for elementary schools which may not be appropriate for migrant children coming from a Spanish-speaking home, even though their language may be considered "Tex-Mex" Spanish. The content and methodology may need revision or adjustment to be useful for the migrant child. Radio Assisted Community Basic Education (RADECO) in the Dominican Republic, which uses interactive radio to teach literacy skills to children is highly effective. It must be noted, however, that the curriculum content corresponds with the national primary education curriculum; similar correspondence needs to be attended to when developing and implementing such programs for migrant students in Michigan.[57]

There are numerous citations where educational technology improves student performance,[58] but there is no guarantee migrant students benefit unless there is relevancy, consistency, and regular easy access. David Dwyer, in "Learning in the 21st Century" (Spring, 1996), reported that the Acot research has shown that technology is an engaging medium for student thought and collaboration. The *smart use of technology*[59] [our italics] increases student academic performance and support the acquisition of a whole new set of 21st Century competencies.[60]

"The Role of Online Communication in Schools: A National Study" demonstrates that students with online access perform better.[61] We need to ensure migrant students are a part of this access and that the learning projects are relevant for them. For an example of relevancy, students around the world are collaborating and creating their own websites.[62] Such activities and collaboration emphasize the participatory nature of Internet use which researchers at the Massachusetts Institute of Technology Media Lab noted. "Students use personal computers much like carpenters use hammers – as tools to construct authentic, personal, and meaningful projects."[63]

Andy Carvin, New Media Program Officer of the Corporation for Public Broadcasting continues, "...instead of existing solely as a place for kids to browse and observe, the Internet becomes an incredible tool for the construction of creative personal projects, both for school and for recreation."[64] The New Zealand Ministry of Education indicates, in *Preparing Minds for the 21st Century,* that, in an effective educational program challenges students to "discover, create, solve problems, and construct solutions by using a variety of tools, machines, computer systems, materials, processes, and technological systems."

Computer-based instruction (CBI) and software for learning and teaching basic and general skills have all been recognized as effective tools for learning based on behavioral, objectivist, empiricist, rational, or direct learning theory. James Kulik, from the University of Michigan, reported in 1995 that: (a) students usually learn more in classes in which they receive computer-based instruction; (b) students learn their lessons in less time with CBI; and (c) students also like their classes more when they receive computer help in them.[65] There's a genuine need to review programs to determine relevancy for migrant children; that information needs to be offered to people directly working with migrant students. The Children's Software Revue (Warren Buckleitner) is a reliable source of information for home and school purposes.[66] Another source of information is through "On Computers," a national high-tech radio talk show.[67]

Teacher preparation and professional development are also supported through technology. The "Road Ahead" program, funded through Microsoft and assisted by the National Foundation for the Improvement of Education (NFIE), is a ground-breaking professional development program for teachers that provides grants, training, and mentoring on the use of telecommunications and multimedia

technology. Lakeside Elementary School in Manistique, Mich., received a grant to research the quality of water in the Manistique Harbor and Lake Michigan.[68] Migrant children could benefit from this type of support program so that they have the opportunity to create innovative-projects directly related to their special needs and interests. The "21st Century Teachers" project[69] challenges every teacher to help build 21st Century schools by committing to four actions: build own expertise in using new learning technologies; share this expertise and experience with colleagues; use this expertise with students as part of the daily learning process; and work to make classroom technology readily available to everyone.

Gaining expertise and experience could be achieved through a program such as "Dave's Digital Notebook Program."

> "The [Digital Notebook] program could be adapted and budgeted by the board in any district and target the faculty plus one or two class levels appropriate to the district to start. Every teacher and student in that group would receive a new electronic notebook to be used for the next few years. The incoming class would get new units the following year. Soon upper level schools would coordinate with feeder schools to provide continuity and periodic upgrades to a program that benefits students. This complements the site-based facilities and adds a useful mobility factor.
>
> It appears this concept is supported by Apple Computer, too. In the Nov. 1996 issue of the 'Apple Education Resource Guide,' several mobile, educational computer products were introduced. The Apple eMate 300 computer is a stylish digital notebook design which was available in 1997. Built-in software includes a word processing program, drawing application, spreadsheet, graphing calculator, address book, and other tools. TCP/IP allows e-mail and Internet access capabilities (modem and access required). Batteries last 25 hours before needing recharging. If units are shared, users' files can be password protected. Macintosh and Windows-based files can be shared as well. Based on the Newton 2.1 operating system, it allows for upgrading storage, memory, and applications in the future. Districts in the process of evaluating and updating their technology plans might consider investigating a digital notebook program. Such a program might be effective and affordable catalyst to providing students and teachers the tools necessary to accomplish educational goals as envisioned by so many these days."

In addition to special programs for teachers and students, there are online websites to help locate and use the resources on the Internet. For example, a popular site is Kathy Schrock's "Guide for Educators."[70] For graduate students in teacher education, the Ohio's University of Dayton uses the World Wide Web and CU-SeeMe video conferencing to learn to problem-solve issues in today's culturally diverse classrooms. Another example concerns a class in New Mexico where the teacher must find the best way of teaching children of migrant workers who don't speak English.[71]

All of these technologies could be instrumental in improving and developing the ways and means for the migrant child to gain access and learn productively wherever they may be. Michigan has the potential to create learning solutions for these children and their families which could be exemplary for the nation and the world. By starting at the lowest local school or community level (i.e., at the local school or community), the choice of technologies which will be most cost effective can be made wisely. In order to accomplish the optimum selection of technologies, the following strategies can be useful: (a) research and analyze, (b) design and develop, and (c) implement while evaluating continuously during each stage of the process.

**Resource Use and Distribution**

Migrant Education, Title I, Part C, developed in the 1960's and refined in 1994, is a federal program that funds the migrant education programs throughout the nation. According to reports published by the JSRI and by the MDOE between 1995 and 1996, in each of the past eight years (1989-96), the State of Michigan has received approximately $12 million of the $300 million available. These funds have served an average of 18,500 migrant students. Schools that serve migrant children can apply for regular school year funding or summer school year funding. The funding is distributed to approximately 60 local migrant education programs in Michigan.

The distribution breakdown is; 39 regular and summer programs; 14 regular school year only; and six summer programs only. The funding for these programs is broken down into the following categories: State-Level Activities: $1.3 million; Unique State-Level Administrative Functions and Analogous Local Functions: $1.8 million; Regular and summer school projects: $9.8 million.

The breakdown shows that the vast majority, 82%, of the funding is for regular and summer school projects. There is close to $5 million for each of these projects. The schools apply for summer school funding on the same application as the regular school year funding, but they are separate projects. The school can apply for funding based on the number of Full Time Equivalents (FTE's) they have in their schools. FTE's are generated by the number of migrant children enrolled in their schools, factoring in the length of their stay. During the regular school year, a school receives around $6,000 for each migrant child as compared to $5,000 for the non-migrant child, according to Leon (1996). The extra money allows schools to develop programs to supplement the migrant child's education. The summer school programs, specifically for the migrant children, provides some students a chance to catch up on their academics. If the student is caught up, the summer program could help the students get ahead and be considered an enrichment program.

The local schools and districts that receive the funds for migrant students are free to design the program for their specific students. Here are some examples. One district hired a Spanish-speaking teacher who helps the migrant students in any area of need. She provides a resource room for students and helps them in any subject. Another school has hired an aide, who does not speak Spanish, to help the students. She tries to work with the students within the normal classroom. She also orders supplies such as books written in Spanish for the elementary school students. There is not a standardized program for the schools to follow.

Administration at the state and local levels was allocated $1.8 million, or close to16% of the funding. This included money used to pay personnel to find the students and get them registered in the schools. The recruiters find the families and have them fill out certificates of eligibility (COE's). Included in this funding is the records transfer system which has been in a state of flux since the National Records Center was dissolved. The State level system was still in the implementation stage as of 1996.

Another $1.3 million was used for State-level activities. This money was divided into various areas with nearly $120,000 used for state administration. Another $700,000 was used for the following areas: Interstate and Intrastate Coordination, Professional Development, Technical Assistance, Statewide Needs Assessment, and Data Collection, Analysis, and Reporting. As of 1996 there were two curriculum projects using approximately $500,000.

*Resource allocation research*

We found that some people feel there is enough money for the number of children served while others feel more money is needed for individual schools. We discerned from our interviews and readings that policy issues and funding, including Migrant Education, are political. As Behn (1981) discussed how politicians are usually interested in a program's inputs and not the outputs, we realize the migrant program is evaluated by how much money is spent, not necessarily by how well programs work. We found student competencies and graduation rates to be low. More systematic process and outcome evaluation studies are needed to determine if funding is producing programs capable of meeting migrant education and national education goals.

Most programs, including the migrant education program, are "top down" programs, those at the top of the hierarchy deciding what is necessary and how to spend money. The problem with this structure is that the people who are at the hierarchy top may not fully understand the problems and needs of those for whom the policy is designed. Therefore, they may design a policy that is impossible to effectively implement. Since the output of the migrant education program is not at the desired level, some different strategies could be used to implement changes. For example, a beginning strategy might be talking with the teachers and students to find out how the policy may work best in the actual schools and classrooms and how the resources should be distributed.

We tried to find out some of these answers in our discussions with teachers and administrators. The regular classroom teachers revealed a lack of teacher training and teaching strategies specific to the migrant children. They may have learned various general techniques during their teacher education courses or from their student teaching, but not how to teach migrant children. This is why the recommendations for teacher recruitment, selection, training, education, and professional development made earlier should be examined.

Important questions for future research include: Regular classroom teachers aside, on whom is the money being spent? Who is hired to teach or be an aide for the migrant students? What should be the qualifications of teachers or aides currently hired for the migrant education programs? What should be the minimum education requirements? Should a certain level of proficiency in both English and Spanish be required for aides and Summer and regular teachers before placing students in a specific school or classroom? If these teachers or aides are not prepared to teach the migrant students, and cannot speak their language, what kind of outcomes can be expected? If a teacher for the deaf did not know sign language, and this is the child's language, how effective would they be? Therefore, the recommendations in the recruitment, selection, education, and professional development are important for improving the outcomes for the migrant students.

The funding for professional development needs to be examined. Currently this area is receiving minimal funds. Professional development is valuable for teachers who actually work with the students and can impact students' progress and achievement. Some of the school funding should go directly towards professional development of teachers or aides who have direct contact with migrant students.

Although more research needs to be done in this area, we believe, based on our interviews and literature review, that the educational resources migrant students have access to seem to be minimal. Migrant students should, in theory, have access to school resources, their dependence on aides who might feel marginal themselves, on regular school teachers who have a full load with their regular students, and their lack of familiarity with the school culture and organization might serve to keep them effectively at the margin. Other than their contact with the migrant teacher or aide, they seem to live a very marginal schooling experience though in theory federal money – but not the organizational support – has been allocated for them to receive a full schooling experience. Supplies can be purchased, but this has not been a strong area for the schools. Teachers and administrators seem to lack the knowledge of any valuable resources available for the migrant students. Teachers and administrators need to be educated and made aware of the resources and technology available, and accountability systems need to be devised to monitor that migrant education policy is implemented to benefit the children. We did find one district using some funds to set up a computer system, creating a sister school in Mexico, the funding does not seem to be used to supply individual students with state of the art technology, such as computers or special software in the schools.

Another area that needs to be researched is funding allocation for summer and regular school-year programs.

The summer programs in Michigan traditionally have more students involved since this is when most of the work is available for the migrant workers. Heiderson and Leon (JSRI *Cifras #8*) state: "three-quarters of the participation (enrollments and withdrawals from migrant education programs) occurs during the summer in June, July, and Aug. One-quarter of the participation occurs during the regular school year from Sept. to May."

Shouldn't more funds go towards the summer program if there are more students enrolled than in the regular school year program? The summer program should have access to supplies and technology so it can truly be an academic program that helps the students. Since students spend a significant amount of time in this program, it needs to be evaluated by measuring their academic progress.

A problem may exist for schools that enroll only a few migrant children because the money for the supplementary programs might not be enough to hire a teacher. A teacher's salary is the same if they are teaching five students or 20. Therefore, schools with low migrant student enrollment may only have enough funds to hire aides who rotate through the schools, spending minimal time with each student. In this case a different formula for funds distribution

needs to be determined so that all migrant students receive equitable access to quality education. Access to a quality of education should not solely depend on large numbers to have available resources.

Another factor that should influence resource allocation is grade level. Heiderson and Leon (JSRI *Cifras #8*) state that the majority of the migrant children are in elementary school in grades six and below. If more students are in elementary schools, they fall behind before they reach the fourth grade, and they never catch up, perhaps more programs and funds should be targeted at the elementary schools. This may help prevent the students from lagging behind and, consequently, dropping out a few years later. This area of research needs to examine the cost-effectiveness of allocating more funds and supports for elementary versus high school students. Criteria for effectiveness should include achievement in standardized tests as well as other indicators like conceptual learning, social development, and the ability to connect across schools experiences.

The money to fund teacher selection, recruitment, and professional development along with new technology may come from a few different areas. Possibly some of the funding provided to the individual school's projects can be directed towards professional development and technology. Administrative dollars can be used to help promote teacher selection and recruitment. Identification and Recruitment is allocated $1 million for state and local level administrative activities while Records Transfer receives approximately $600,000. There seems to be some redundancy in the state and local levels. If the state and local Identification and Recruitment efforts and Records Transfer could be coordinated, then some funds may become available for these projects.

*Summary*

The migrant education program has been funded since the 1960's. Money has filtered from the state, to the districts, and the schools to supplement the current educational program. More evaluation studies are necessary to understand whether programs have met established migrant education or national educational goals. Resource reallocation can lead to funding of teacher selection and professional development programs and new technology for migrant programs.

## Directions for Future Policy

Ideally a policy report includes a section on directions for future policy. In this report, however, we look instead at what needs to be done before providing policy recommendations.

We began our inquiry into the migrant education policy as part of a course, but also with a practical interest and legitimate commitment to addressing an issue affecting many children from an unempowered section of our population. Our purpose was to initiate a dialogue with some of the most salient actors in the migrant education arena and provide the beginnings of a critical, constructive examination of this policy in Michigan. Although our inquiry has limitations of funding, time, and location, we began learning about some of the complex problems surrounding the education of migrant children. Throughout our modest inquiry, rather than coming up with clear solutions, we have been able to come up with a series of questions that might help reformulate the problems for the policymakers and constituencies involved.

Throughout our readings and conversations we have defined four action areas in need of attention: teaching, teachers education and development; family involvement; technology; and the development, distribution, and use of resources.

In addition, we have been able to identify two policy areas of concern: the locus of the decision-making process versus the locus of implementation processes (how much student, teacher, and parental voices are heard at the policymaking level); and the need for developing an accountability and evaluation system to learn from and regulate the activities that until now seem to lack focus, direction and a degree of coherence (standardization) across the board.

These two axis have served to guide our efforts in this modest project.

We recommend, as a starting point, that focus groups, comprised of administrators, teachers, parents, and students, form in each district to design small pilot studies of the migrant education program. These pilot studies will investigate the following three questions for each of the four action areas discussed throughout our report (teaching, teachers education and development, family involvement,

technology, and development, distribution and use of resources): What is being currently implemented and under what conditions? How is it working? For whom does it work?

We also recommend these studies be collaboratively designed with the different program constituencies, with special attention to the concerns voiced by teachers, students, parents, and local level administrators. This would be *their* studies and *they* will be the main beneficiaries of the results.

The results of these small, but sound, studies would allow policymakers and implementors to reflect on what they are doing in order to improve their practice. In addition, the studies will result in the development of a clearer focus and sense of direction for the migrant education program. The indicators and data collection mechanisms used by the small pilot studies could then be implemented as an evaluative and accountability mechanism.

The migrant education program has been continuously implemented since the mid 1960's in Michigan with mixed or unclear results. We believe it is time to learn from this experience and develop strategies that are beneficial to migrant children and their families. Neither the state nor the nation can afford a rate of failure larger than 50% in a federally-funded program. You are invited to take a a critical look at this important issue.

**Endnotes**

1. Dr. Maria Teresa Tatto was the instructor for the course at MSU, Fall 1996. The name of the course was TE 965 "The craft of policy analysis." Work on the project was equal among the authors. Direct comments to mttatto@msu.edu.
2. For instance, inviting experts from California such as Ruiz and Figueroa who have shown impressive changes on teachers and students. See Ruiz, N. (1995). "Learning-handicapped classrooms with Latino students: Optimal learning environment project." *Education urban society*; 27 (4) 463-83.
3. We address the issue of whether these difficulties should be perceived by the public and those in power as warranting attention. According to Kingdon, there are three major ways that conditions become defined as problems (and garner attention): indicators, such as the magnitude of or a change in a condition; focusing events, such as a disaster or personal crisis; and feedback, such as unanticipated consequences or a failure to meet goals. If any one of these events or conditions is widespread or widely known, more than likely a condition will become defined as a problem (Kingdon, 1984). The problems facing migrant students have not recently changed dramatically, nor has a disaster or crisis called attention to them (although many argue that funding cuts are disastrous and crisis causing). However, it is safe to say that the programs in place to serve the needs of migrant students have had unanticipated consequences and have in a number of instances failed to meet their goals. Thus, we have a problem.
4. Trotter, 1992, 14.
5. The National Education Goals associated with the Goals 2000 Project are, by the year 2000: all children in America will start school ready to learn; by the year 2000, the high school graduation rate will increase to at least 90%; all students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, history and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our Nation's modern economy; the Nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century; U.S. students will be first in the world in mathematics and science achievement; every adult American will be literate and possess the knowledge and skills necessary to compete in a global economy and exercise their rights and responsibilities of citizenship; every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol, and will offer a disciplined environment conducive to learning; and, by the year 2000, every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children (Goals 2000, 1995, 10-13).
6. Goodlad, 1990, 9.

7. Goals 2000, 1995, 63.
8. Goals 2000, 1995, 64.
9. Goals 2000, 1995, 64.
10. The Goals 2000 report states that parent behaviors - like talking with children about school experiences, limiting television access, ensuring after-school supervision, knowing the parents of their children's friends,, and engaging in contact with the school - are associated with improved test scores. But, by their very nature, migrant families will never meet this ideal. The population's transitory nature, language difficulties, and political unempowerment, make nearly all of these impossible to achieve regardless of the emphasis placed upon them. The partnerships that the National Education Goals advocate would be incredibly difficult for migrant families even with the "plans" suggested in the report. Several types of parental involvement are beneficial to student learning: helping families form environments supportive of student learning through parental education programs (literacy, GED, college credit); recruiting and organizing parental support through postcard surveys; supporting learning at home by providing information and creating assignments that encourage discussion and interaction; including parents in school's decision-making processes through parent-teacher organizations; advisory groups, and committees; integrating community resources through providing information on community activities (Goals 2000, 1995).
11. Meier and Stewart, 1991.
12. Meier and Stewart, 1991, 59.
13. Goldenberg, 1996, 10.
14. Rosenbaum and Siles, 1995, 5.
15. Goldenberg, 1996, 12.
16. Goldenberg, 1996, 22.
17. Goldenberg, 1996, 17-18.
18. Heiderson and Leon, 1996, 11.
19. Trotter, 1992.
20. Weatherly and Lipsky, 1977, 178-9.
21. Weiss, 1983, 221.
22. Weiss, 1983, 221.
23. Weatherly and Lipsky defined the phenomena of local policymaking within the context of larger "top down" policies as street-level bureaucracy. A street level bureaucrat (SLB) is a public worker whose personal and organizational resources are chronically and severely limited in relation to the tasks they are asked to perform. The demand for services will always be as great as their ability to supply them. To accomplish their required tasks, SLBs must find ways to accommodate the demands placed upon them and confront the reality of resource limitations. They typically do this by developing routine procedures, modifying goals, rationing services, asserting priorities, and limiting or controlling clientele. They develop practices that permit them, in some way, to process the work that they are required to do (Weatherly and Lipsky, 1977).
24. Weatherly and Lipsky, 1977, 172.
25. Meier and Stewart, 1991, 222.
26. Tyack and Cuban, 1995.
27. Elmore, 1979, 611-12.
28. Rein wrote: "the weakness of the universalist-formalist position is its failure to resolve the problems presented by a larger universe of eligible clients that available resources can accommodate, creating a situation in which it is difficult or impossible to reach those in greatest need with quality services. Although the selectivist-discretionary position may be designed to serve as a blunt instrument for promoting compliance and thus run the risk of leading to compulsion, it has limited effectiveness in promoting these aims and avoiding the problems associated with the effort" (Rein, 1983). The universalist approach to policy, as demonstrated in Goals 2000, has a distinctly assimilative feel. Grouping migrant students along with other "disadvantaged groups" permits them to be addressed as one "type" of problem. Through education, theoretically, migrant students will become more like successful students – Americanized with a middle class facade. Through their education, migrant students will be able to contribute more to the country as a whole. The education of this population is beneficial not only to individuals, but the larger group. A powerful sense of "social compassion" accompanies any program to benefit migrant students. Without education, it is understood that migrant students will be confined to a state of disadvantage, poverty, and prejudice.
29. Behn, R. 1981, 225.
30. See, for instance, the recent report published by the National Commission on *Teaching and America's Future*, Sept., 1996.
31. See *Michigan Department of Education Consolidated Education Plan*, March 1996, Lansing, Mich.: Michigan Department of Education.

32. Danaher, P.A. (1994). "The role of course development and design in an itinerant schooling program: The perceptions of staff members of the School of Distance Education in Brisbane, Queensland." *(ER AAQ5749)*.
33. Schmidt, K. (1994). "Teaching migrant students algebra by audioconference." *American Journal of Distance Education*, 8 (3) (51-63).
34. Ruiz, N. (1995). "Learning-handicapped classrooms with Latino students: The optimal learning environment project." *Education and Urban Society*, 27 (4) 463-83.
35. Flores, N.L. (1991) "Meeting the challenge of improving the oral communications of at-risk Latino students." *(ER AAK0337)*
36. Even in one of the most progressive districts, the program revolved around one (excellent) resource teacher who worked out of a resource room. The program seemed understaffed and lacked resources with only a full time teacher assisting students with academic classes, literacy, learning roles, and survival skills. Most students perceive this teacher as helping them decipher the schooling structure and determine how to fit in the regular classrooms. In smaller rural districts, resource aides go to each classroom;. she takes notes for the students, but does not speak Spanish. There is relatively no attempt to structure the classroom or the instructional environment to meet the needs of the students.
37. Moll, L. (1990) "Community knowledge and classroom practice: Combining resources for literacy instruction." Technical Report *(ER AAJ9212)*.
38. Romo, H. (1993). "Mexican immigrants in high schools: Meeting their needs" *(ER AAL4377)*.
39. Fifty-three percent of Hispanic Americans, 25 and older, received their high school diploma ("U.S. Latinos: socio-demographic and Educational Dimensions," Julian Samora Research Institute, Fall 1996). Mazin Heiderson (1996) estimates that 10% of migratory children are never identified, and 15% of those identified are never served, by the Migrant Education Program, and the high school completion rate is much lower. (*Nexo*, Julian Samora Research Institute, Spring 1996).
40. More research needs to be done to outline the characteristics of teachers, teaching, and teacher education for this population.
41. Buchmann, 1986; 1990; Cochran, DeRuiter, and King, 1993; Prawat, 1992; Richardson, 1990; Schon, 1987; Zeichner and Gore, 1990.
42. Zeichner, 1993; Prawat, 1992.
43. Gergen, 1995.
44. Gergen, 1995.
45. Gergen, 1995.
46. Feiman-Nemser and Parker, 1993; Mosenthal and Ball, 1992.
47. Weiss' (1983) "Ideology, Interests, and Information," Ryan's (1981) "Equality," Elmore's (1979) "Backward Mapping: Implementation Research and Policy Decisions." These framing sources lead us to believe that by examining key players' perspectives, ideologies, interests, and informational sources, which we have done, by delineating the scope of the problem, and by getting close to the source of the problem, we are in a better position – since the beginning of our study – to make suggestions concerning problem of migrant family involvement with the schools.
48. Recruiters, usually district workers, identify eligible migrant students.
49. "Lone Star 2000: Documenting Successful School or University Teaching and Learning" http//:www.thejournal.com/past/oct/1096feat3.html
50. "Rural District's Partnerships Bear Fruit in Three Years," http://www.thejournal.com/past/oct/1096feat4.html
51. ISDLC 1995-96 Program Series, http://www.ese20.tenet.edu/star/prog.html
52. http://star.ucc.nau.edu/
53. "Lessons Learned, In Basic Education in the Developing World," Office of Education, Bureau for Science and Technology, U.S. AID, Washington, D.C., 1990.
54. See also the 1993 U.S. Census Report, http://www.census.gov/population/socdemo/computer/comp1.txt
55. http://www.edugate.org ("News, Resources and Trends," Syllabus, Nov./Dec. 1996, 10.
56. Elmore, Richard F., "Backward Mapping: Implementation Research and Policy Decisions," *Political Science Quarterly*, v94, n4, Winter 1979-80.
57. Hernandez de Rosario, Margarita, "RADECO: An Education Alternative in the Dominican Republic."
58. "How Education Technology Improves Student Performance," http://www.21ct.org/yellowbook/ybook-3-3.html

59. A "smart use" of technology is one which incorporates and builds upon past learning and previous research of gains related to technology use. It is "far more than just dropping technology into classrooms" (Dwyer, 9), and it is more than using computers only to facilitate exercises that can be accomplished effectively using other media. "Smart use" implies a change in learning culture to one in which teachers "seek a balance between the appropriate use of direct instruction strategies and collaborative, inquiry-driven knowledge construction strategies." http://www.cusd.chico.k12.ca.us/~tgray/3Dhorses.html
60. Gray, T., "Watering all the Horses," http://www.cusd.chico.k12.ca.us/~tgray/3Dhorses.html
61. "CAST: Telecommunication Study," http://www.cast.org/stsstudy.html
62. Yvonne Marie Andres, WWWEDU listserv e-mail reference to "Classrooms Go Global, Students worldwide design Websites for their Communities," Nov. 17, 1996, Cyberfair 97.
63. http://www.cusd.chico.k12.ca.us/~tgray/3Dhorses.html
64. http://k12.cnidr.org:90/thejournal.html
65. "Effectiveness," http://www.ed.gov/Technology/Plan/RAND/Costs/costs4.html
66. http://www.microweb.com/pepsite/Revue/revue.
67. http://www.oncomputers.com
68. http://www.nea.org/resources/rdahead.html
69. http://www.21ct.org/yellowbook/ybook-1-1.html
70. http://www.capecod.net/Wixon/Wixon.htm
71. "Students Learn Teaching Skills Through Lessons in Cyberspace," Syllabus, Nov/Dec 1996, http://www.syllabus.com

## References


Behn, R. 1981. "Policy Analysis and Policy Politics." *Policy Analysis*, 199-226.

Buchmann, M. 1986. "Role over person: Morality and authenticity in teaching," *Teachers College Record*, 87, 529-543.

Buchmann, M. 1990. "Beyond the lonely, choosing will: Professional development in teacher thinking," *Teachers College Record*, 91, 481-508.

Carger, C.L. 1996. *Of Borders and Dreams: A Mexican-American Experience of Urban Education*. New York: Teachers College Press.

Cochran, K.F., J.A. DeRuiter, and R.A. King. 1993. "Pedagogical content knowing: An integrative model for teacher preparation." *Journal of Teacher Education*, 44, 263-272.

Condon, M.W.F., J.A. Clyde, D.W. Kyle, and R.A. Hovda. 1993. "A constructivist basis for teaching and teacher education: A framework for program development and research on graduates." *Journal of Teacher Education*, 44, 273-278.

Danaher, P.A. 1994. "The role of course development and design in an itinerant schooling program: The perceptions of staff members of the School of Distance Education in Brisbane, Queensland" *(ER AAQ5749)*.

Delpit, L. 1988. "The silent dialogue" *Harvard Educational Review*, 58 (3).

Edwards, P. and G. Garcia. 1991. "Parental Involvement in mainstream schools." (In M. Foster (Ed.), *Reading on Equal Education:Qualitative Investigations into Schools and Schooling*. New York: AMS Press.

Elmore, R. 1979. "Mapping: Implementation Research and Policy Decisions." *Political Science Quarterly*, 94(4), 601-616.

Feiman-Nemser, S. and M. Parker. 1993. "Mentoring in context: A comparison of two U.S. programs for beginning teachers," *International Journal of Educational Research*, 19, 667-778.

Fieldnotes from Van Buren School District, Sept. 30, 1996.

Fieldnotes from Stockbridge School District, Oct. 14, 1996.

Flores, N.L. 1991. "Meeting the challenge of improving the oral communications of at-risk Latino students." *(ER AAK0337)*

Gergen, K.J. 1995. "Social construction and the educational process," in Steffe, L.P. and J. Gale (Eds.) *Constructivism in education*, 17-39. Hillsdale, N.J.: Erlbaum.

Goldenberg, C. 1996. "Latin American Immigration and U.S. Schools." *Social Policy Report*, 10(1).

Goodlad, J.I. 1990. *Teachers for Our Nation's Schools*. San Francisco: Jossey-Bass Inc.

Heiderson, Mazin and Edgar Leon. 1996. "Patterns and Trends in Michigan Migrant Education." *Statistical Brief No. 8*, JSRI, MSU.

Interview at WMU, Sept. 30, 1996.

Interview notes from Michigan Department of Education and Migrant Education, Nov. 4, 1996.

Interview notes from JSRI, Oct. 21, 1996.

Jackson, Linda. 1996. "Stereotypes, Emotions, Behavior, and Overall Attitudes Toward Hispanics by Anglos." *Research Report #10*, JSRI, MSU.

Johnson, Johnson, and Maruyama. 1983. "Interdependence and Interpersonal Attraction Among Heterogeneous and Homogeneous Individuals: A Theoretical Formulation and a Meta-analysis of Research." *Review of Education Research*, 53 (1).

Kingdon, J. 1984. *Agendas, Alternatives and Public Policies*. Boston: Little, Brown and Company.

Meier, K., and J. Stewart. 1991. *The Politics of Hispanic Education*. Albany: State University of New York Press.

Menchaca V.D. and J.A. Ruiz-Escalante. 1995. "Instructional Strategies for Migrant Students," ERIC clearinghouse on Rural Education and Small Schools, Charleston, W.V.

Michigan Department of Education Consolidated Education Plan, March 1996, Lansing, Mich.: Michigan Department of Education.

Moll, L. 1990. "Community knowledge and classroom practice: Combining resources for literacy instruction." Technical Report *(ER AAJ9212)*.

Mosenthal, J., and D.L. Ball. 1992. "Constructing new forms of subject matter instruction: Subject matter knowledge in in-service teacher education." *Journal of Teacher Education*, 43, 361-371.

National Commission on Teaching and America's Future, Sept., 1996.

National Education Goals Report: Executive Summary. 1995. Goals 2000.

*Nexo*, JSRI, Spring 1996.

Platt, Cranston-Gingras, and Scott. 1991. "Understanding and Educating Migrant Students. Preventing School Failure." *Review of Education Research*, 36 (1).

Prawat, R.S. 1992. "Teachers' beliefs about teaching and learning: A constructivist perspective." *American Journal of Education*, 100, 354-395.

Rein, M. 1983. *From Policy to Practice*. New York: Sharpe.

Richardson, V. 1990. "Significant and worthwhile change in teaching practice." *Educational Researcher*, 19 (7), 10-18.

Romo, H. 1993. "Mexican immigrants in high schools: Meeting their needs," *(ER AAL4377)*.

Rosenbaum, Rene, and Marcelo Siles. 1995. "The Education of Hispanics in Michigan: A Comparative Assessment." *Nexo*, newsletter of the Julian Samora Research Institute, 1-9.

Ruiz, N. 1995. "Learning-handicapped classrooms with Latino students: The optimal learning environment project." *Education and Urban Society*, 27 (4) 463-83.

Ruiz, N. 1995. "Learning-handicapped classrooms with Latino students: The optimal learning environment project." *Education and urban society*, 27 (4) 463-83.

Ryan, W. 1981. *Equality*. NY: Pantheon.

Schmidt, K. 1994. "Teaching migrant students algebra by audioconference." *American Journal of Distance Education*, 8 (3), 51-63.

Schon, D. 1987. *Educating the reflective practitioner*. San Francisco, Calif.: Jossey-Bass.

Tatto, M. T. "The Limits and Possibilities in Reconstructing Teacher-Parent Relations in the Context of School Reform: A Case Study," (unpublished manuscript).

Tatto, M.T. 1996. "Examining values and beliefs about teaching diverse students: Understanding the challenges for teacher education," *Educational Evaluation and Policy Analysis*, 18 (2).

Tatto, M.T. and N.G. Kularatna. 1993. "The interpersonal dimension of teacher education: Comparing distance education with two other programs in Sri Lanka," *International Journal of Educational Research*, 19 (8).

"The National Education Goals Report: Building a Nation of Learners." 1995. Washington, D.C.: National Education Goals Panel.

Trotter, A. 1992. "Harvest of Dreams." *American School Board Journal*, 179(8), 14-19.

Tyack, D., and L. Cuban. 1995. *Tinkering Toward Utopia*. Cambridge: Harvard University Press.

U.S. Latinos: Socio-demographic and Educational Dimensions, JSRI, Fall 1996.

USAID. 1990. "Lessons Learned, In Basic Education in the Developing World," Office of Education, Bureau for Science and Technology, U.S. AID, Washington, D.C.

Weatherly, R., and M. Lipsky. 1977. "Street-Level Bureaucrats and Institutional Innovation: Implementing Special Education Reform." *Harvard Educational Review*, 47(2), 171-197.

Weiss, C.H. 1983. "Ideology, Interests and Information: The Basis of Policy Positions." In D. Callahan and B. Jennings (Eds.), *Ethics, The Social Sciences, and Policy Analysis*, 213-245. New York: Plenum Press.

Zeichner, K.M. 1993. "Educating teachers for cultural diversity," (NCRTL Special Report). East Lansing: MSU, National Center for Research on Teacher Learning.

Zeichner, K.M., and J.M. Gore. 1990. "Teacher socialization." In W.R. Houston (Ed.), *Handbook of research on teacher education*, 329-348. New York: Macmillan.

## The New School Program in Colombia

by Vicky Calbert, Clemencia Chiappe, and Jaira Arboleda

*Multigrade classrooms and child-centered learning adopted nationwide*

The New School Program in Colombia was organized in 1975 as a system of primary education that integrates curricular community administrative financial and training strategies. It responds to the problems of rural education by providing active instruction, a strong school-community relationship, and flexible promotion which allows students to advance from one grade to another at their own pace. Children can leave school to help their parents with agricultural tasks, or for any other valid reason, without jeopardizing their education. Since the lack of teachers is a major problem in rural primary education, the New School Program is designed for schools that have only one or two teachers to teach all the grades (multigrade teaching).

The New School Program addresses problems of high dropout and repetition rates. Instead of the teacher and the school schedule imposing the pace of learning, the New School's flexible promotion is based on the child's rate of learning.

Innovations such as these, which are made at the child's level, require changes in curriculum, in teacher training, and in school-community relations. Accordingly, the New School Program developed concrete strategies in these areas. At the same time, the program was designed with the idea of eventually expanding throughout rural Columbia.

The New School curriculum is oriented towards inductive, concrete, active learning that is relevant to the child and includes: study guides (self-instructional materials for children from 2nd to 5th grade in natural science, math, social studies, and language): a school library containing reference materials: activity or learning centers: and a school government. Curriculum can be adapted for different regions using indigenous materials, local folksongs, legends, and proverbs, encouraging children to apply what they know in their real life while learning about their regional culture.

Training and follow-up for teachers and administrative agents are in-service active training workshops rather than informative courses. Teachers are trained to become facilitators rather than lecturers, to assume leadership role in the community, and regard administrators and technical assistance positively. They are trained to handle the New School curriculum, to adapt the school timetable to accommodate flexible promotion, to adapt the study guides to each child's level and environment, and handle several grades at once.

Administrative agents are trained to become an immediate resource person and technical support for the teacher, to organize teacher training workshops, and to give teachers positive attitudes towards working with them and the New School Program. Administrator also replicate their own training workshops with the teachers.

Overall community improvement is promoted by the New School in a variety of ways. As the first step in community development, teachers are shown how to prepare a community map, a family information register, and a calendar of agricultural, social, and cultural events. Folksongs, stories, and myths contained in the curriculum also become a source of cultural information for the community. Children also participate in health, sanitation, and nutrition activities with their parents and siblings.

Evaluations show that students in the New School, where one or two teachers are responsible for several grades, are as creative as students in regular schools that have one teacher per grade. New School students' self-esteem is much higher, however, and the girls' self-esteem is as high as the boys'. In tests on socio-civic behavior, [illegible] for third grade, and Spanish for third and fifth grades, New School children scored considerably higher than children in traditional rural schools.

The average costs for the New School Program are: teacher training per teacher for a year is (U.S.) $82; the school library is (U.S.) $150; in 1982 the cost for study guides for one student in four subjects came to (U.S.) $15. Costs per student are really only one-fourth of this amount, since the same materials are used at the school during a 4-year period.

**Lessons for Planners**

The main factor that contributed to the success of the New School as it expanded nationwide from a pilot program lies in its flexibility. The child centered, multigrade model is one that adapts to the needs of the people it serves. When the New School program was adopted nationwide, it was supported with full political commitment and sufficient government funding. Other factors of interest to planners are:

- the roles of researchers, planners, and administrators were well coordinated as a team effort;
- parents, teachers, administrators, and children participated in planning and there was a link between building knowledge edge and taking action; and
- the organizational capacity of the pilot program was expanded. A core team remained together and moved to key leadership positions during expansion. Supervisors assumed the role of teacher trainers while [illegible] the classroom innovations.

For more information, write to Vicky Colbert, [illegible] Colombia.

*Appendix A*



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# RADECO

by Margarita Hemandar de Rosarlo

An education alternative in the Dominican Republic

RADECO (Radio Assisted Community Basic Education) is a unique model of education that uses interactive radio to teach literacy skills to children (Grades 1-4) living in remote areas of the Dominican Republic where formal education is not yet available.

There are several reasons for the lack of formal schools:

- terrain is impassable by car or truck. Some places are inaccessible except by muleback or on foot;
- Families dependent on migratory farming. Their subsistence and livelihood depends on what is produced in a particular region; they often move;
- Sparsely populated areas. Accordingly, very few school-aged children – often only between 10 and 30 – will live in these communities.

Because of these conditions, it is difficult for the State to build and maintain school buildings.

This is where RADECO offers a solution to the national education problem. With its system of interactive education by way of the radio, RADECO programs can be delivered to all children, no matter where they live even if they have no fixed abode.

Since its inception in 1982, RADECO has expanded the Dominican Education System. By 1986, the program had progressed from a pilot project to an official program becoming a part of the Secretary of State of Education, Arts and Culture. RADECO operates in the Southwest region of the Dominican Republic, in the provinces of Barahona, Independencia, Bahoruco, Pedernales, San Juan de la Maguana, and Azua. There are 74 RADECO centers or schools, distributed among 20 communities. Some 2,000 school-aged children are reaping the benefits of education by means of the program.

With RADECO, the radio is the teacher. A local facilitator, who supervises the children, passes out worksheets, and tunes in the radio station, is, in the majority of cases, someone from the community. The community also provides a volunteer who will act as a guide during the radio lessons. This volunteer should have been educated beyond the fourth grade.

The curriculum content in the RADECO program corresponds to the official primary education curriculum. Radio transmissions include programs to teach the alphabet, reading (grammar, social studies, nature, urban studies, music, recreation, and exercise), and mathematics. Children carry out written and workbook assignments from the exercise manuals designed for that purpose.

Theoretical explanations are minimal; oral segments continue for a few minutes and use children's current knowledge as the basis for instruction. The content of the program is delivered gradually in 170 didactic lessons adapted to radio. Each lesson lasts about an hour; 30 minutes for math and 30 minutes for letters and related subjects.

The results have been very positive. Three groups have graduated from the first basic cycle of the primary level, representing 1,071 children who can read and write well enough to enter formal schools.

RADECO supplies all of the necessary materials to teach and learn. It offers other advantages as well:

- it unites children within their own vicinity by using an existing facility, community center, or school within the same area;
- classes last only one hour, permitting students dents to attend school and work; and
- it provides a low cost education.

RADECO supplies the regions in which it operates with the needs of formal schools. By helping to overcome barriers to education access, such as the shortage of school buildings and classroom space, costs, and distance, RADECO provides a key to the Dominican Republic's Education System.

*Margarita Hernandez de Rosario is Executive Director of RADECO, Department of Radio Education of the Dominican Republic Secretariat of Education, Fine Arts and Religions*